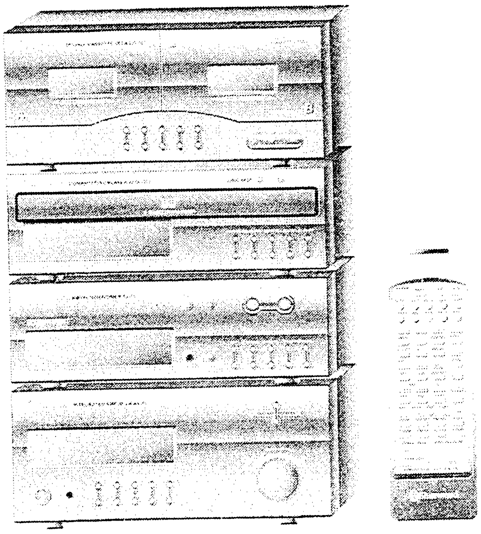
SERVICE MANUAL

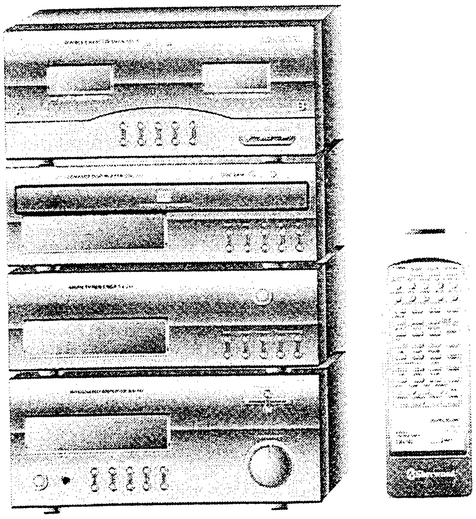
AUDIO & VIDEO MINI COMPONENT SYSTEM

P-757



- AV-757
  STEREO INTEGRATED AMPLIFIER
- TX-757
  FM/AM STEREO TUNER & TIMER
- CDC-757/ VCDC-757
  MULTI COMPACT DISC PLAYER
  / VIDEO COMPACT DISC PLAYER
- DD-757
  STEREO DOUBLE CASSETTE DECK

P-747



- AX-747
  STEREO INTEGRATED AMPLIFIER
- TX-747
  FM/AM STEREO TUNER & TIMER
- CDC-757/ VCDC-757
  MULTI COMPACT DISC PLAYER
  / VIDEO COMPACT DISC PLAYER
- DD-757
  STEREO DOUBLE CASSETTE DECK

Sherwood®

■ CONTENTS ■

■ AV-757/AX-747 ■

Safety Precautions ······3
System Connection ······4
Specifications ······7
Block Diagrams I,II ······9
Disassembly Procedures ······11
Circuit Description ······12
Mechanical Parts List ······16
Exploded View ······17
Printed Circuit Boards ······18
Electrical Parts List ······19
IC Functional Block Diagram ······21
Schematic Diagrams I, II ······22
Wiring Diagram ······24

■ TX-757/TX-747 ■

Specifications ······25
Block Diagrams I, II ······27
Disassembly Procedures ······29
Circuit Description ······30
Alignment Procedures ······33
Troubleshooting ······36
Mechanical Parts List ······38
Exploded View ······39
Printed Circuit Boards ······40
Electrical Parts List ······41
IC Functional Block Diagram ······44
Schematic Diagrams I, II, III ······49
Wiring Diagram ······52

■ CDC-757/VCDC-757 ■

Specifications ······53
Block Diagrams I, II ······54
Laser Beam Satety Precations ······56
Before Repairing the Compact Disc Player ······57
Pickup Replacement ······58
Disassembly Procedures ······60
Circuit Description ······61
Trobleshooting ······66
Mechanical Parts List ······70
Exploded Views I, II ······71
Printed Circuit Boards ······73
Electrical Parts List ······74
IC Functional Block Diagram ······75
Schematic Diagrams I, II ······80
Wiring Diagram ······82

■ DD-757 ■

Specifications ······83
Block Diagram ······84
Wiring Diagram ······85
Disassembly Procedures ······86
Circuit Description ······86
Alignment Procedures ······90
Troubleshooting ······93
Mechanical Parts List ······95
Exploded View ······96
Printed Circuit Boards ······97
Electrical Parts List ······97
IC Functional Block Diagram ······99
Schematic Diagram ······100

▪ AV-757/AX-747 ▪

SAFETY PRECAUTION

WARNING

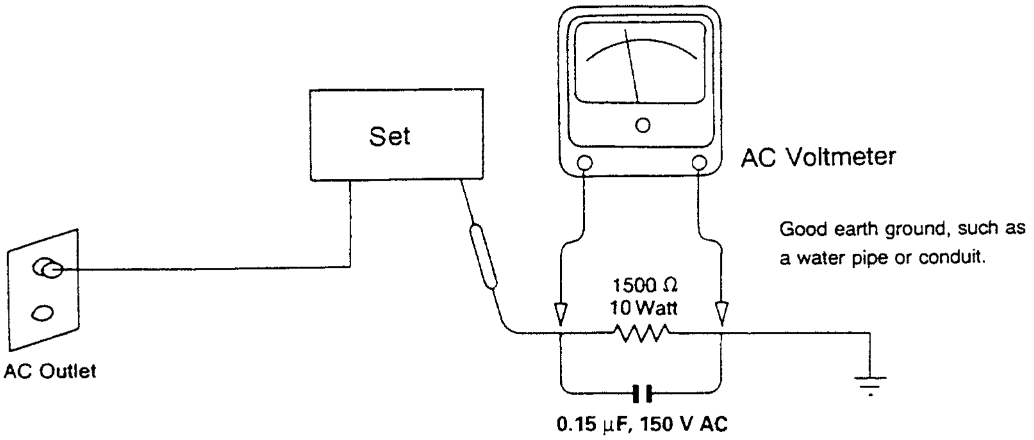
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements: electrical components having such features are identified by ⚠ in the schematic diagram and the parts list.

   Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate danger of electrical shock. Plug the AC line cord directly into a 120 V AC outlet (120 V AC version only). (Do not use a line isolation transformer during this check.) Be sure your AC voltmeter has a sensitivity of 5000 Ω per volt or greater. Then connect a 1500 Ω 10 watt resistor, paralleled by a 0.15 μF 150 V AC capacitor, between a known good earth ground (such as a water pipe, or conduit) and the exposed metalic parts, one at a time. Measure the AC voltage across the combination of a 1500 Ω resistor and a 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metalic part. Voltage measured must not exceed 0.75 V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

At 5000 Ω per volt or greater sensitivity,
the reading should not exceed 0.75 V.

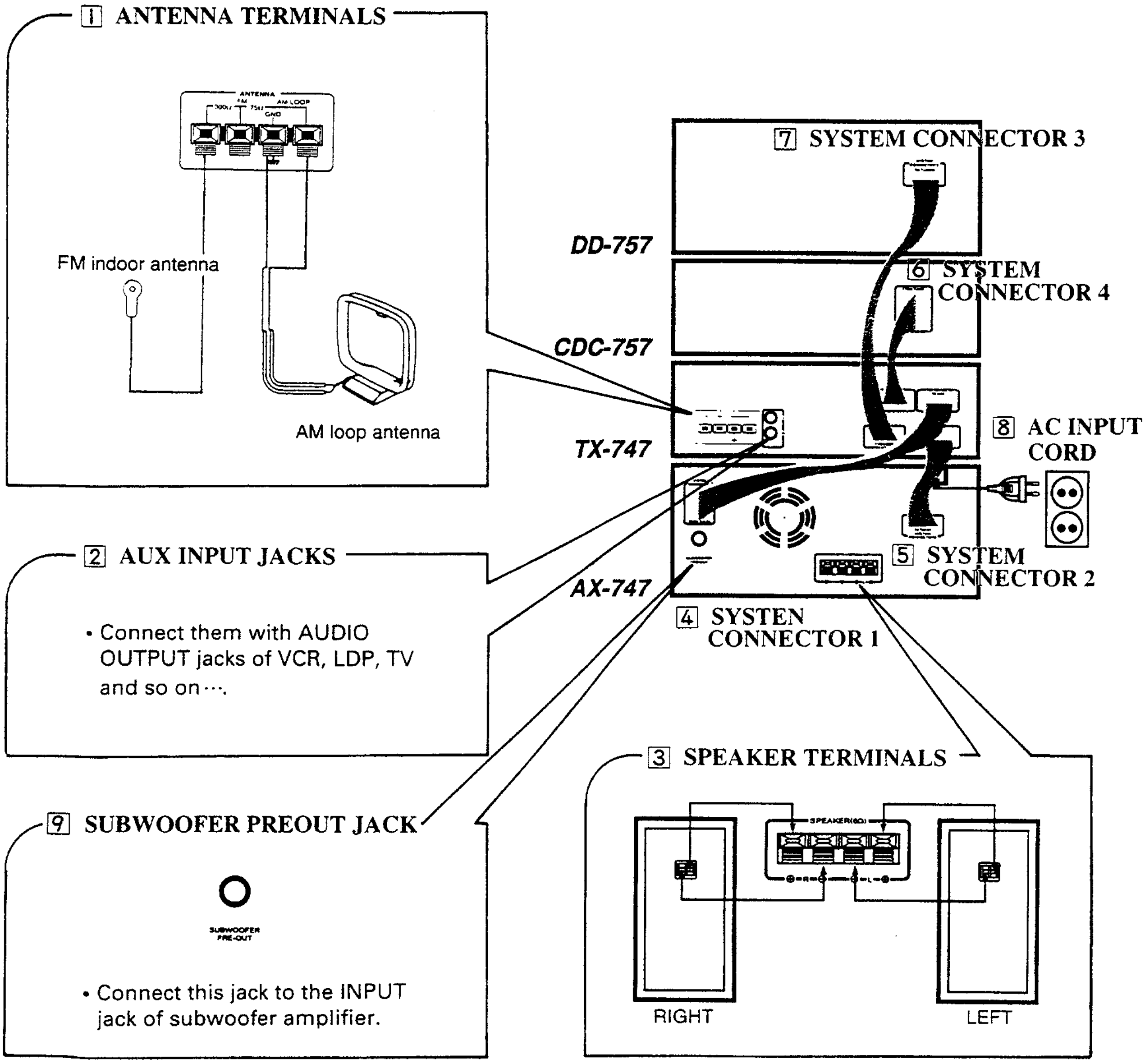


Place the probe on each exposed metalic part.

SYSTEM CONNECTIONS

- Do not plug the AC input cord the AC outlet when plugging and unplugging connection cords.
- Make connections firmly and correctly according to the channel (Left and Right), polarity (+ and -) and connector(system 1 to 4). If not, it can cause loss of sound, noise or damage to unit.
- Be sure to use speakers of impedance 6 Ω.
- Place the AM loop antenna as far as possible from this system, TV, speaker cords and AC input cord and set it to a direction for the best reception.
- If the reception is poor with the AM loop antenna, an AM outdoor antenna can be used without the AM loop antenna.
- If the sound quality is poor with the FM indoor antenna, connect an FM outdoor antenna instead of the FM indoor antenna.
- If the electricity fails or the AC input cord is leaved unplugged for more then 15 days, the memorized contents are all cleared. So you should memorize them again.

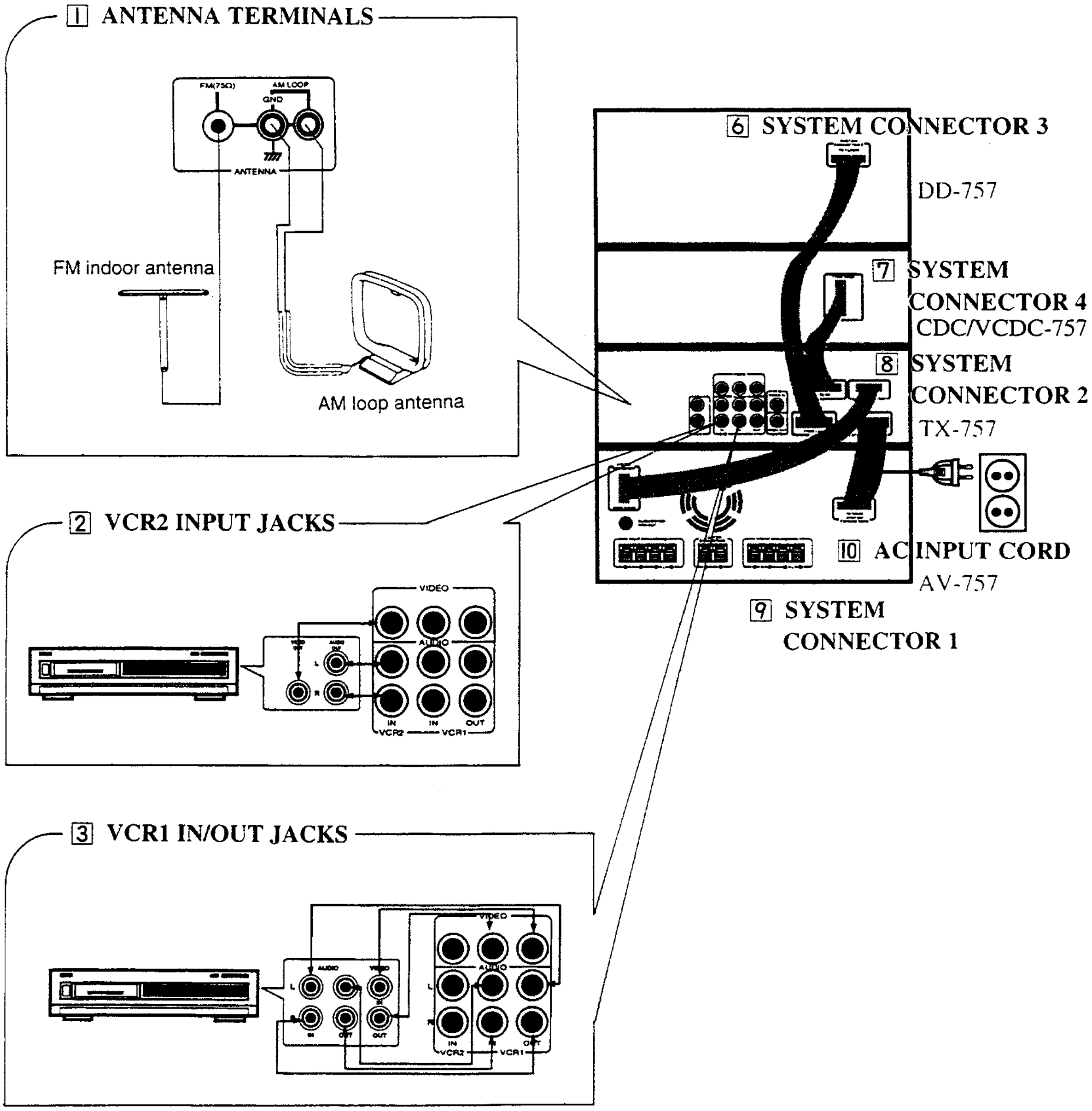
■ P-747 ■

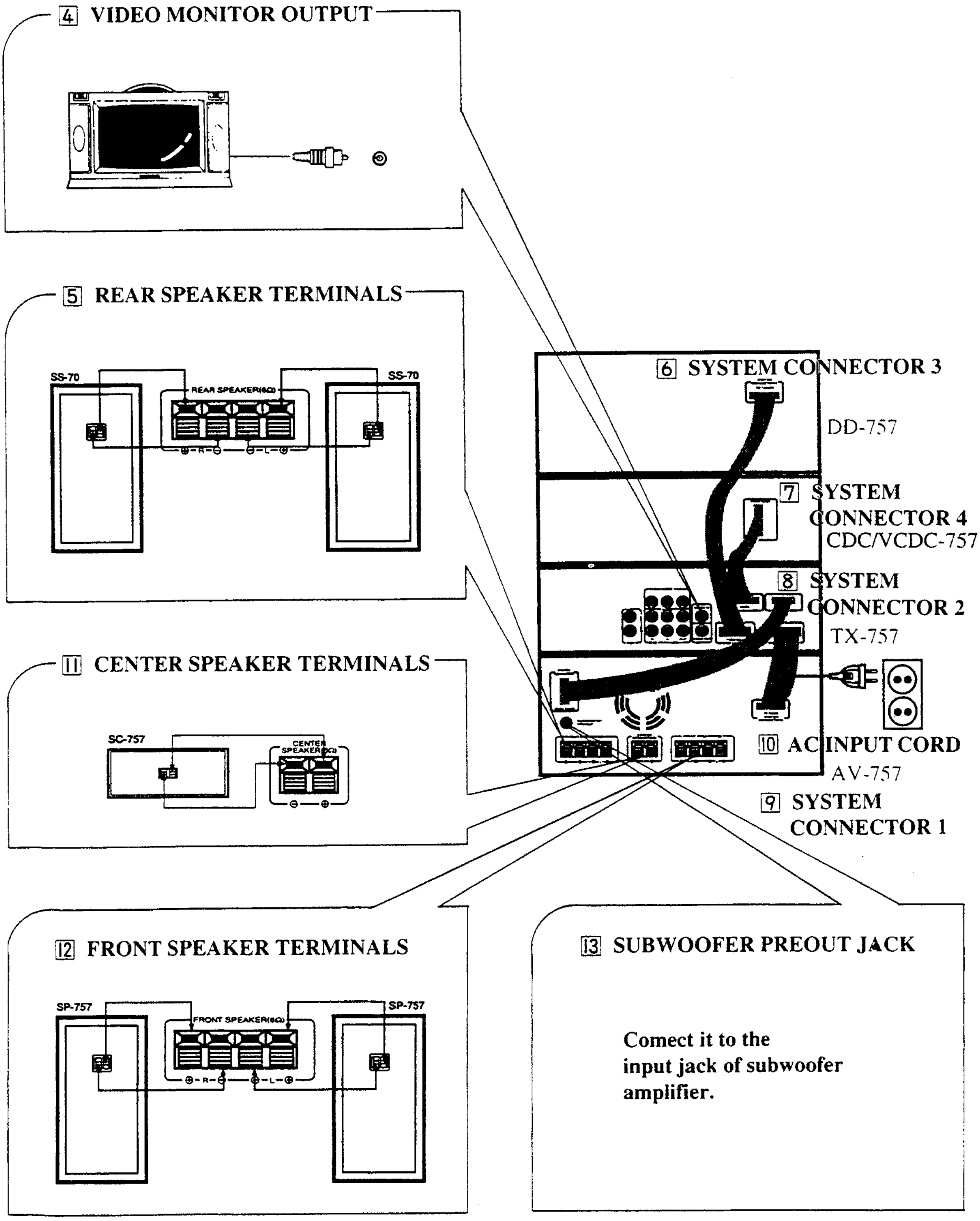

1 ANTENNA TERMINALS
ANTENNA
FM
AM LOOP
GND
FM indoor antenna
AM loop antenna
DD-757
CDC-757
TX-747
AX-747
7 SYSTEM CONNECTOR 3
6 SYSTEM CONNECTOR 4
8 AC INPUT CORD
5 SYSTEM CONNECTOR 2
4 SYSTEN CONNECTOR 1
2 AUX INPUT JACKS
9 SUBWOOFER PREOUT JACK
SUBWOOFER PRE-OUT
3 SPEAKER TERMINALS
SPEAKER(6Ω)
RIGHT
LEFT

- Connect them with AUDIO OUTPUT jacks of VCR, LDP, TV and so on⋯.

- Connect this jack to the INPUT jack of subwoofer amplifier.

■ P-757 ■


1 ANTENNA TERMINALS
FM(75Ω)
AM LOOP
GND
ANTENNA
FM indoor antenna
AM loop antenna
2 VCR2 INPUT JACKS
VIDEO
AUDIO
L
R
IN
OUT
VCR2
VCR1
3 VCR1 IN/OUT JACKS
VIDEO
AUDIO
L
R
IN
OUT
VCR2
VCR1
6 SYSTEM CONNECTOR 3
DD-757
7 SYSTEM CONNECTOR 4
CDC/VCDC-757
8 SYSTEM CONNECTOR 2
TX-757
10 AC INPUT CORD
AV-757
9 SYSTEM CONNECTOR 1


4 VIDEO MONITOR OUTPUT
5 REAR SPEAKER TERMINALS
SS-70
REAR SPEAKER(6Ω)
SS-70
⊕ R ⊖ ⊖ L ⊕
11 CENTER SPEAKER TERMINALS
SC-757
CENTER SPEAKER(6Ω)
⊖ ⊕
12 FRONT SPEAKER TERMINALS
SP-757
FRONT SPEAKER(6Ω)
SP-757
⊕ R ⊖ ⊖ L ⊕
6 SYSTEM CONNECTOR 3
DD-757
7 SYSTEM CONNECTOR 4
CDC/VCDC-757
8 SYSTEM CONNECTOR 2
TX-757
10 AC INPUT CORD
AV-757
9 SYSTEM CONNECTOR 1
13 SUBWOOFER PREOUT JACK

Comect it to the
input jack of subwoofer
amplifier.

SPECIFICATIONS

FRONT SECTION

Description	Unit	Nominal	Limit
RMS. output power <stereo mode> Input: VIDEO, THD < 0.5%, 6 ohms load both channels driven at 1 kHz	W	≥53	≥50
<surround mode: AV-757 only> THD < 0.5%, 6 ohms load single channels driven at 1 kHz	W	≥33	≥30
Total Harmonic Distortion	%	≤0.2	≤0.2
Signal to Noise Ratio (IHF-A WTD), Input shorted	dB	≥85	≥80
Channel Separation with 4.7 kohms terminated. Input: VIDEO, 1 kHz	dB	≥50	≥50
Channel Unbalance, Input: VIDEO, 1 kHz	dB	≤1	≤2
Frequency Response at -3 dB	Hz	10~60 k	20~40 k
X-Bass compensation at 80 Hz	dB	8±2	8±3
EQ Control (60, 150, 400, 1 k, 2.4 k, 6 k, 15 k) Hz	dB	10±2	10±3
Headphone Output at Rated PWR, 50 W Headphone Impedance: 68 ohms	mV	1200±200	1200±300

CENTER SECTION (AV-757 ONLY)

Description	Unit	Nominal	Limit
RMS. output power THD < 0.5%, 6 ohms, 1 kHz Only center channel driven	W	≥33	≥30
Signal to Noise Ratio (IHF-A WTD), Input shorted Input: 350 mV	dB	≥78	≥73
Frequency Response at -3 dB, Wide mode	Hz	20~18 k	50~15 k

REAR SECTION (AV-757 ONLY)

Description	Unit	Nominal	Limit
RMS output power THD < 0.7%, 12 ohms load Only rear channel driven at 1 kHz	W	≥18	≥15
Signal to Noise Ratio (IHF-A WTD), Input shorted Input: 350 mV, Delay time: 20 ms	dB	≥85	≥80
Frequency Response at -3 dB	Hz	80~7 k	100~6 k

General

Power consumption

Version Model	A	D	PT INDO	KS
P-747		230 W	260 W	230 W
P-757	140 W	350 W	380 W	240 W

Dimensions (HxWxD)

AV-757/AX-747: 274×117×280 mm (10-3/4×4-11/18×11 inches)
DD-757: 274×117×280 mm (10-3/4×4-11/18×11 inches)
TX-757/TX-747: 274×87×280 mm (10-3/4×3-3/7×11 inches)
CDC-757/VCDC-757: 274×87×320 mm
(10-3/4×3-3/7×12-10/16 inches)

Weight (Net)

(AV-757+DD-757+TX-757+CDC-757/VCDC-757): 14.7 kg (32.407 lbs)
(AX-747+DD-757+TX-747+CDC-757/VCDC-757): 14.7 kg (32.407 lbs)

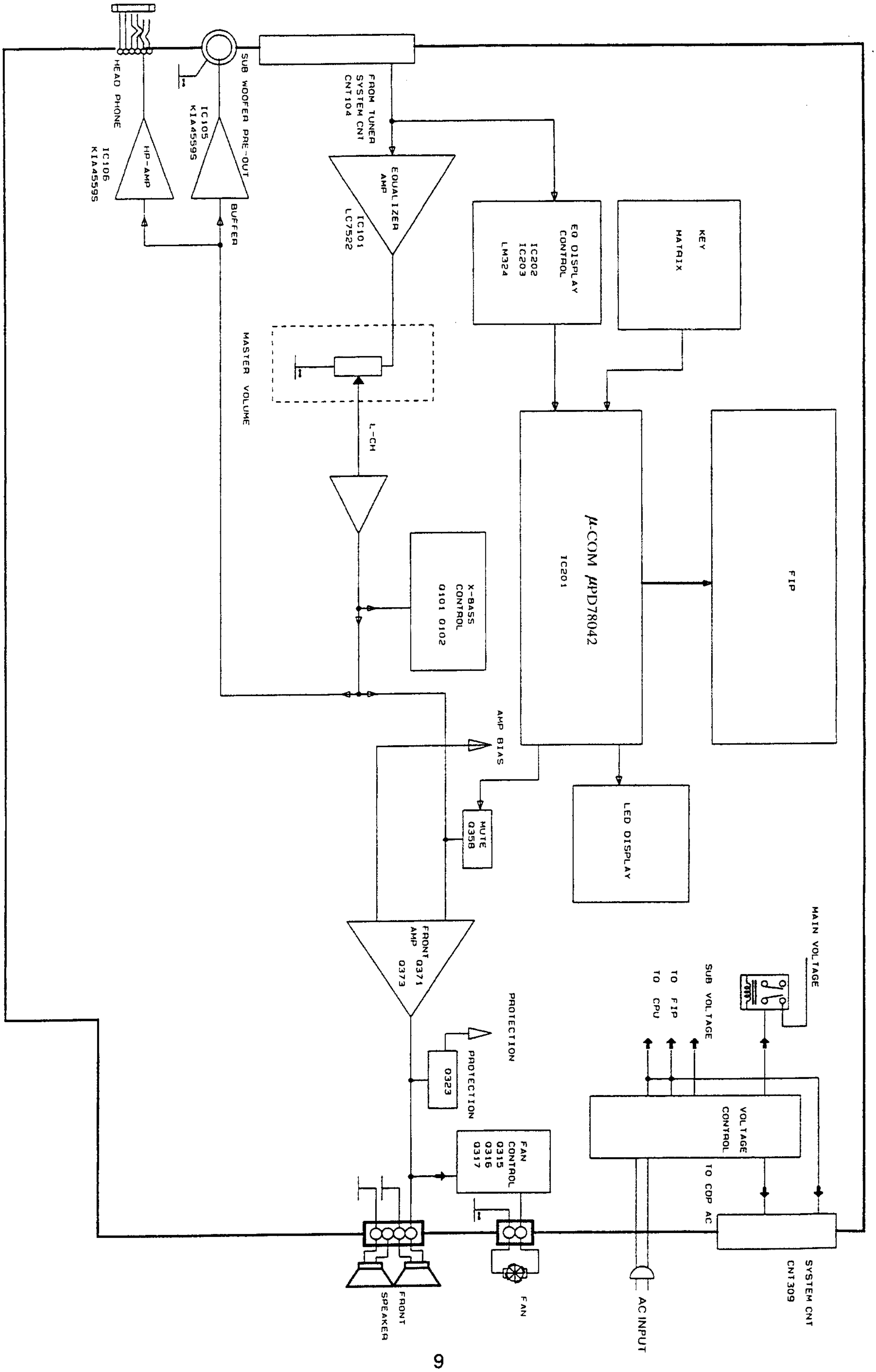
Power Supplies

A: 120 V 60 Hz, USA & Canada version
D: 230 V 50 Hz, Europe version
B: 110/220 V 50/60 Hz, Multi area version (PT INDO)
KS: 220 V 60 Hz, Korea version

Note : Nominal specs represent the design specs. All units should be able to approximate these. Some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition that still might be considered acceptable ; in no case should a unit fail to meet limit specs.
This manual is based on the EUROPE Standard wiring diagram, and information on regional component variations through use of parts list. Design and specifications are subject to change without notice for improvement.

BLOCK DIAGRAM I

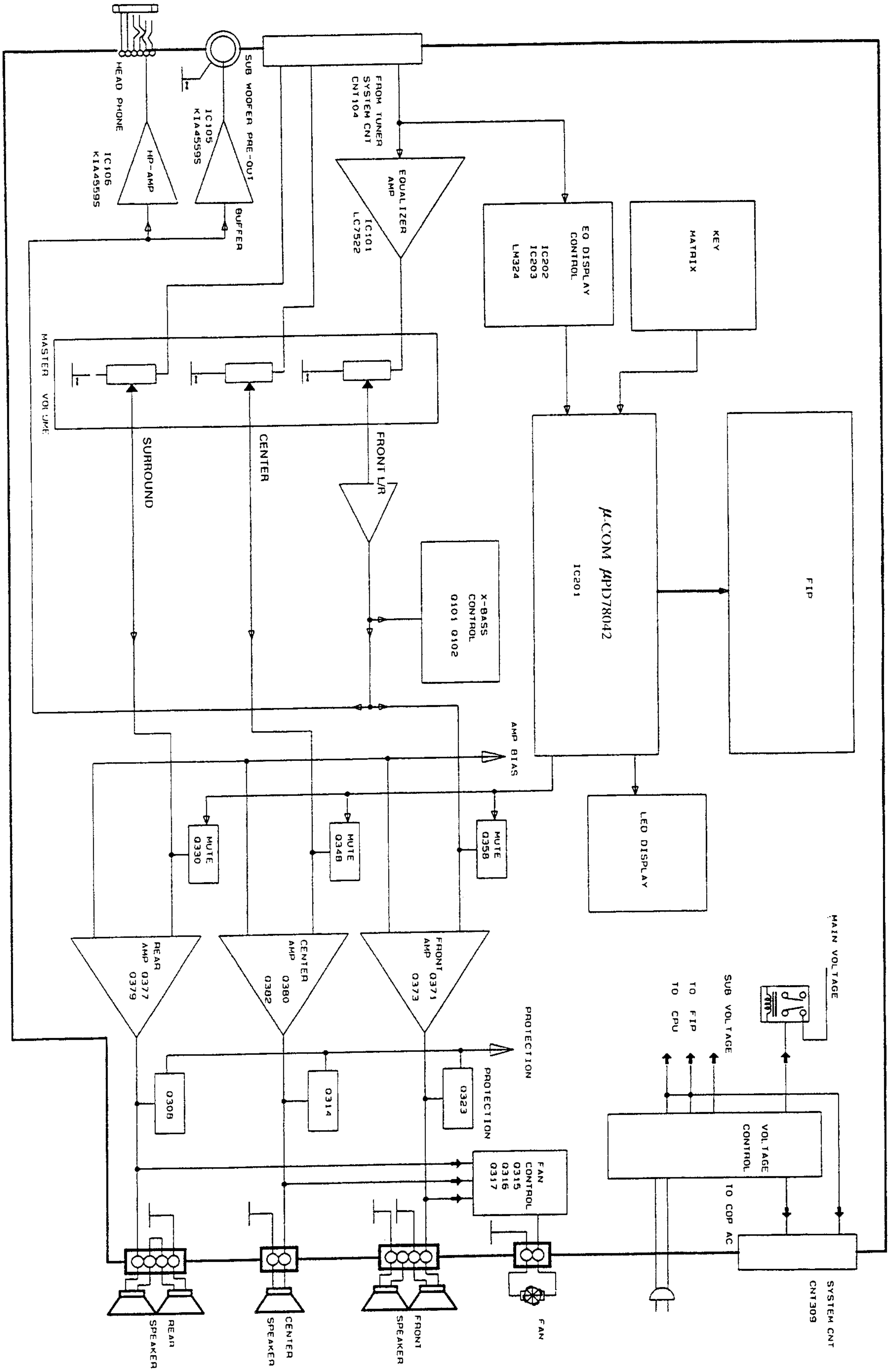
Model No. : AX-747



HEAD PHONE
HP-AMP
IC106
KIA4559S
SUB WOOFER PRE-OUT
IC105
KIA4559S
BUFFER
FROM TUNER
SYSTEM CNT
CNT104
EQUALIZER
AMP
IC101
LC7522
EQ DISPLAY
CONTROL
IC202
IC203
LM324
KEY
MATRIX
MASTER VOLUME
L-CH
μ-COM μPD78042
IC201
FIP
X-BASS
CONTROL
Q101 Q102
AMP BIAS
MUTE
Q358
LED DISPLAY
FRONT AMP Q371
Q373
PROTECTION
Q323
PROTECTION
FAN
CONTROL
Q315
Q316
Q317
MAIN VOLTAGE
SUB VOLTAGE
TO FIP
TO CPU
VOLTAGE
CONTROL
TO CDP AC
FRONT
SPEAKER
FAN
AC INPUT
SYSTEM CNT
CNT309

BLOCK DIAGRAM II

Model No. : AV-757


HEAD PHONE
IC106
KIA4559S
HP-AMP
SUB WOOFER PRE-OUT
IC105
KIA4559S
BUFFER
FROM TUNER
SYSTEM CNT
CN104
EQUALIZER
AMP
IC101
LC7522
EQ DISPLAY
CONTROL
IC202
IC203
LM324
KEY
MATRIX
MASTER VOLUME
SURROUND
CENTER
FRONT L/R
X-BASS
CONTROL
Q101 Q102
μ-COM μPD78042
IC201
FIP
AMP BIAS
MUTE
Q330
MUTE
Q348
MUTE
Q358
LED DISPLAY
MAIN VOLTAGE
SUB VOLTAGE
TO FIP
TO CPU
REAR
AMP Q377
Q379
CENTER
AMP Q380
Q382
FRONT
AMP Q371
Q373
PROTECTION
Q308
Q314
Q323
PROTECTION
FAN
CONTROL
Q315
Q316
Q317
VOLTAGE
CONTROL
TO CDP AC
SYSTEM CNT
CN309
REAR
SPEAKER
CENTER
SPEAKER
FRONT
SPEAKER
FAN

DISASSEMBLY PROCEDURES

REFER TO PAGES 17 AND 24.

[1] COVER TOP REMOVAL

Remove 6 screws ⓐ and then remove the Cover Top❷.

[2] FRONT PANEL ASSEMBLY REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Remove the Card Cable from wafer (CNT303) on the Main P.C.Board (PCB3).
3. Remove the Card Cable from wafer (CNT101) on the Volume P.C.Board (PCB4).
4 Disconnect (CNT102) from the EQ P.C.Board (PCB1).
5. Remove 7 screws ⓑ and then remove the Front Panel Assembly AA.

[3] VOLUME P.C.BOARD (PCB4) REMOVAL.

1. Remove the Cover Top❷, referring to the previous step [1].
2. Remove the Front Panel Assembly AA, referring to the previous step [2].
3. Disconnect (CNT501) from the Volume P.C. Board (PCB4).
4. Pull out the Volume Knob⓬ with Volume LED P.C.Board (PCB6).
5. Remove 2 screws ⓒ and then remove the Volume P.C.Board (PCB4).

[4] FRONT P.C.BOARD (PCB2) REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Do steps [2] and [3].
3. Remove 7 screws ⓓ and then remove the Front P.C.Board (PCB2) by pressing the hooks around it outward.

[5] HEADPHONE P.C.BOARD (PCB5) REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Remove the Front Panel Assembly AA, referring to the previous step [2].
3. Remove a screw ⓔ and then remove the Headphone P.C.Board (PCB5).

[6] EQ P.C.BOARD (PCB1) REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Remove the Card Cable from wafer (CNT101) on the EQ P.C.Board (PCB1).
3. Disconnect (CNT102) from the EQ P.C.Board (PCB1).
4. Remove a screw ⓕ and then remove the EQ P.C.Board (PCB1).

[7] VOLTAGE SELECTOR P.C.BOARD (PCB7) REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Disconnect (CNT801 and CNT802) from the Voltage Selector P.C.Board (PCB7).
3. Remove a screw ⓖ and then remove the Voltage Selector P.C.Board (PCB7).

[8] CHASSIS BACK REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Disconnect (CNT306 and CNT309) from the Main P.C.Board (PCB3).
3. Remove 12 screws ⓗ and then remove the Chassis Back ㉗ . (at AV-757)
   Remove 8 screws ⓗ and then remove the Chassis Back ㉗ . (at AX-747)

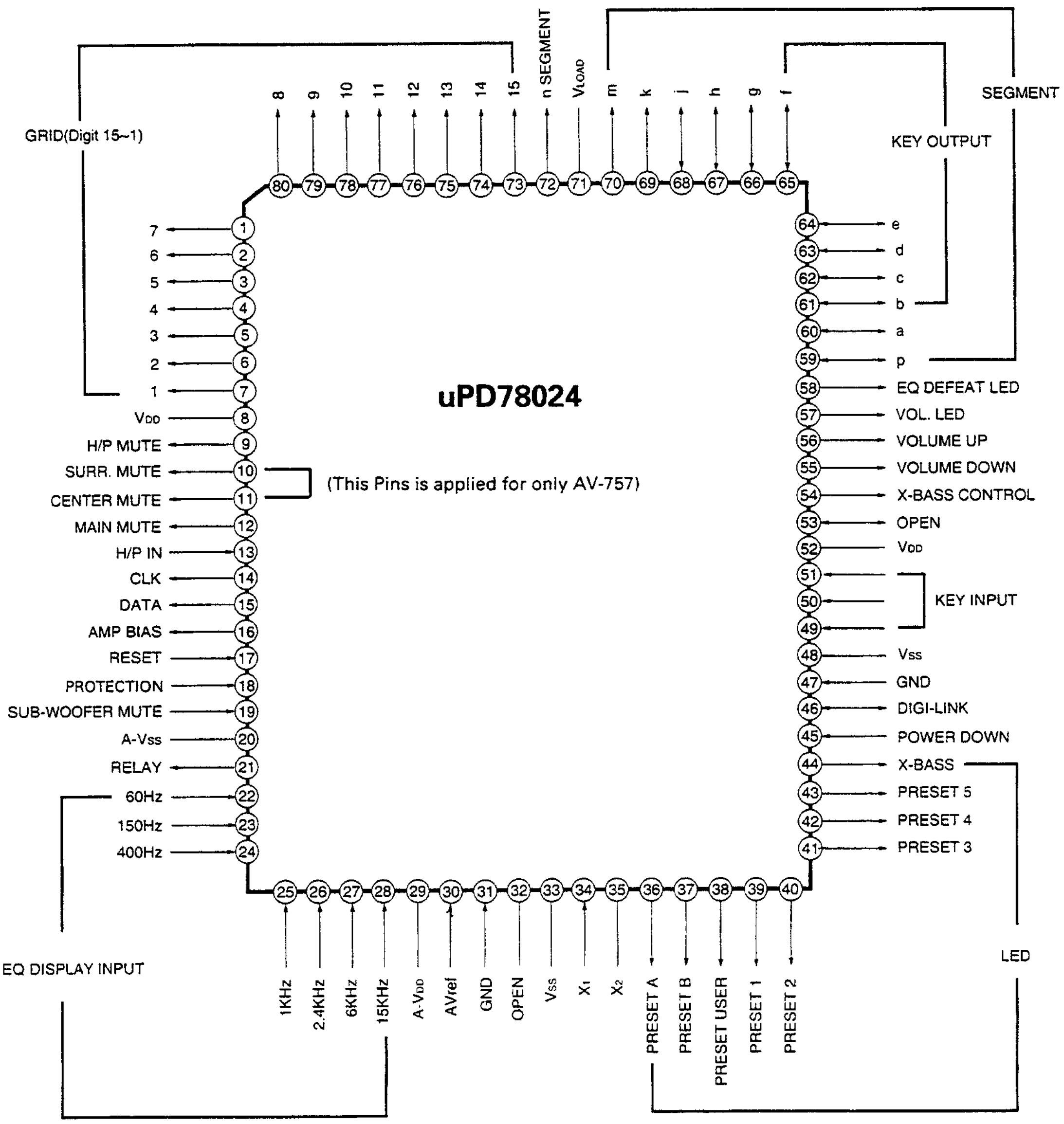
[9] MAIN P.C.BOARD (PCB3) REMOVAL

1. Remove the Cover Top❷, referring to the previous step [1].
2. Do steps [6] and [8].
3. Remove Card cable from wafer (CNT308) on the Main P.C.Board (PCB3).
4. Disconnect (CNT301 and CNT302) from the Main P.C.Board (PCB3).
5. Remove 3 screws ⓘ.
6. Remove the Fastener ㉒ and then remove the Main P.C.Board (PCB3).

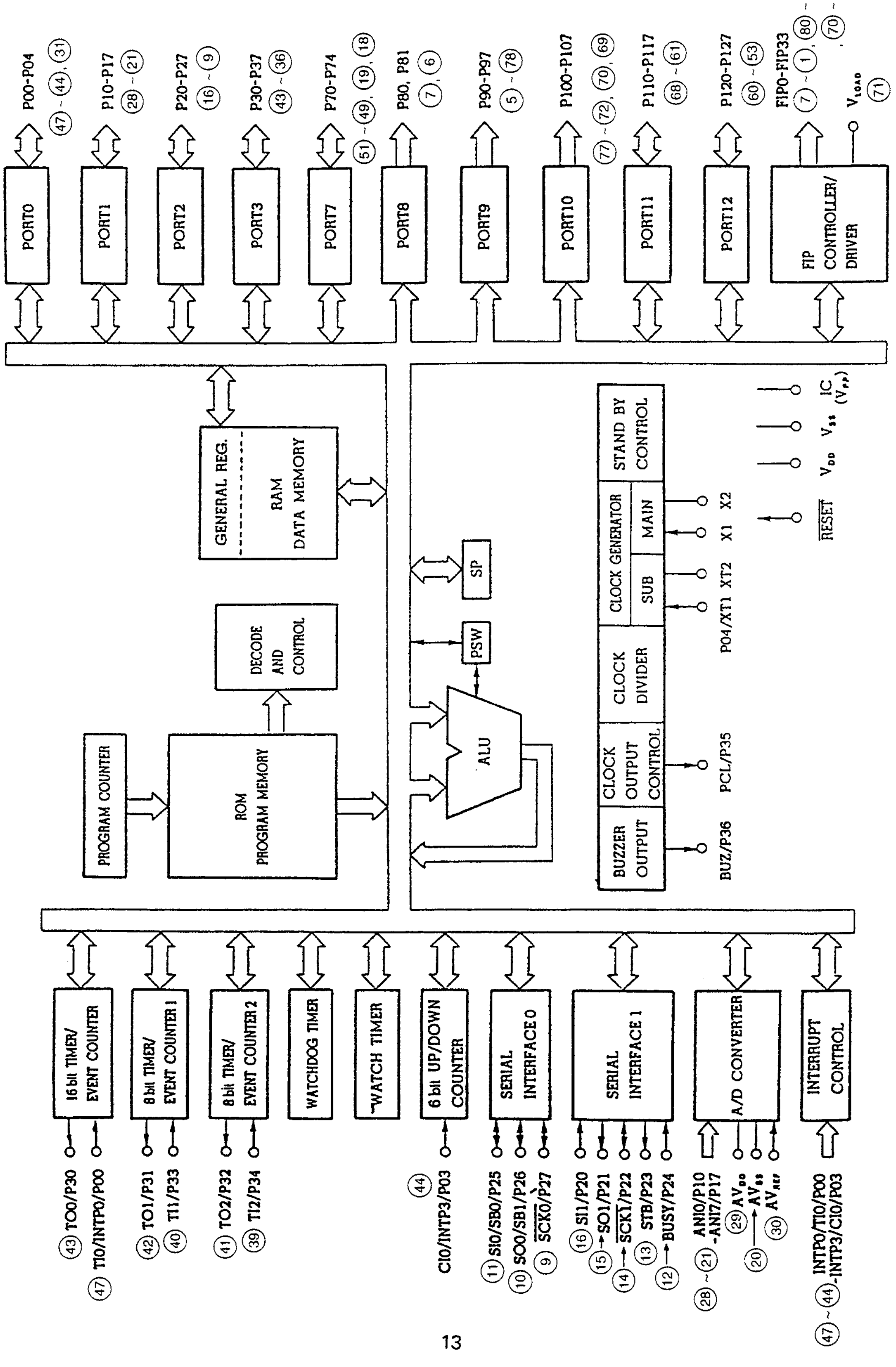
CIRCUIT DESCRIPTION

CPU(IC201):µPD78042

1. Pin Description


GRID(Digit 15~1)
8
9
10
11
12
13
14
15
n SEGMENT
V_{LOAD}
m
k
i
h
g
f
SEGMENT
KEY OUTPUT
uPD78024
7
6
5
4
3
2
1
V_{DD}
H/P MUTE
SURR. MUTE
CENTER MUTE
(This Pins is applied for only AV-757)
MAIN MUTE
H/P IN
CLK
DATA
AMP BIAS
RESET
PROTECTION
SUB-WOOFER MUTE
A-Vss
RELAY
60Hz
150Hz
400Hz
EQ DISPLAY INPUT
1KHz
2.4KHz
6KHz
15KHz
A-V_{DD}
AVref
GND
OPEN
V_{SS}
X_1
X_2
PRESET A
PRESET B
PRESET USER
PRESET 1
PRESET 2
LED
e
d
c
b
a
p
EQ DEFEAT LED
VOL. LED
VOLUME UP
VOLUME DOWN
X-BASS CONTROL
OPEN
V_{DD}
KEY INPUT
Vss
GND
DIGI-LINK
POWER DOWN
X-BASS
PRESET 5
PRESET 4
PRESET 3

2. Block Diagram


PORT0
P00-P04
(47)~(44), (31)
PORT1
P10-P17
(28)~(21)
PORT2
P20-P27
(16)~(9)
PORT3
P30-P37
(43)~(36)
PORT7
P70-P74
(51)~(49), (19), (18)
PORT8
P80, P81
(7), (6)
PORT9
P90-P97
(5)~(78)
PORT10
P100-P107
(77)~(72), (70), (69)
PORT11
P110-P117
(68)~(61)
PORT12
P120-P127
(60)~(53)
FIP CONTROLLER/ DRIVER
FIP0-FIP33
(7)~(1), (80)~(72), (70)~(53)
V_{LOAD}
(71)
GENERAL REG.
RAM DATA MEMORY
DECODE AND CONTROL
PROGRAM COUNTER
ROM PROGRAM MEMORY
SP
PSW
ALU
STAND BY CONTROL
CLOCK GENERATOR
MAIN
SUB
CLOCK DIVIDER
CLOCK OUTPUT CONTROL
BUZZER OUTPUT
X2
X1
P04/XT1 XT2
PCL/P35
BUZ/P36
RESET
V_{DD}
V_{SS}
IC (V_{PP})
16 bit TIMER/ EVENT COUNTER
(43) TO0/P30
(47) TI0/INTP0/P00
8 bit TIMER/ EVENT COUNTER 1
(42) TO1/P31
(40) TI1/P33
8 bit TIMER/ EVENT COUNTER 2
(41) TO2/P32
(39) TI2/P34
WATCHDOG TIMER
WATCH TIMER
6 bit UP/DOWN COUNTER
(44)
CI0/INTP3/P03
SERIAL INTERFACE 0
(11) SI0/SB0/P25
(10) SO0/SB1/P26
(9) SCK0/P27
SERIAL INTERFACE 1
(16) SI1/P20
(15) SO1/P21
(14) SCK1/P22
(13) STB/P23
(12) BUSY/P24
A/D CONVERTER
(28)~(21) ANI0/P10 -ANI7/P17
(29) AV_{DD}
(20) AV_{SS}
(30) AV_{REF}
INTERRUPT CONTROL
(47)~(44) INTP0/TI0/P00 -INTP3/CI0/P03

3. Input and Output Terminal Functions

Pin No.	Symbol	Description
1~7	DIGIT 7~DIGIT 1	Output for grid.
8	Vdd	+5 V power supply.
9	H/P MUTE	Output for headphone mute. Output, high level under the following conditions. 1. When power is turned on or off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed.
10	SURR. MUTE <AV-757 ONLY>	Output for surround mute. Output, low level under the following conditions. 1. When power is turned off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed. 5. When surround mode is turned off.
11	CENTER MUTE <AV-757 ONLY>	Output for center mute. Output, low level under the following conditions. 1. When power is turned off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed. 5. When center mode is turned off.
12	MAIN MUTE	Output for left and right chanels mute. Output, low level under the following conditions. 1. When power is turned off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed.
13	H/P IN	Input for detecting headphone. When headphone is plugged or unplugged, input is high or low level.
14/15	CLK/DATA	CLK/DATA output to LC7522.
16	AMP BIAS	Output for bias control. When 3 seconds elapses after "power on", "H" and at "power off", "L".
17	RESET	Input to reset u-com.
18	PROTECTION	Input for protection. At "protection on", "L" and at "protection off", "H".
19	SUBWOOFER MUTE	Output for subwoofer preout mute. Output, low level under the following conditions. 1. When power is turned on or off. 2. When function is changed. 3. When "-∞ mute signal" is received from the commander. 4. When headphone plug is inserted.
20	A-Vss	This pin provides the analog ground potential.
21	RELAY	Output for relay control. At "power on", "H" and at "power off", "L".
22~28	EQ DISPLAY INPUT	Input for EQ display.
29	A-Vdd	+5 V power supply.
30	A-Vref	Reference voltage.
31	GND	Ground

Pin No.	Symbol	Description
32	OPEN	Not used !
33	Vss	This pin provides the ground potential.
34/35	X1/X2	Input and output for crystal oscillator.
36～38	PRESET A,B USER LED	Output to light up preset A, B or user LED. When selecting the desired mode, the corresponding output is "H".
39～43	PRESET 1,2,3,4,5 LED	Output to light up preset 1, 2, 3, 4 or 5 LED. When selecting the desired mode, the corresponding output is "H".
44	X-BASS LED	Output to light up X-BASS LED. At "x-bass on", "H" and at "x-bass off", "L".
45	P/D	Input for power down. (At "L", it is active)
46	DIGI-LINK	Input/Output for controlling digi-link.
47	GND	Ground
48	Vss	This pin provides the ground potential.
49～51	KEY INPUT	Input data for key scan.
52	Vdd	+5 V power supply.
53	OPEN	Not used !
54	X-BASS CONTROL	Output for X-BASS control. At "x-bass on", "L" and "x-bass off", "H".
55/56	VOL. UP/DOWN	Output to control volume motor.
57	VOL. LED	Output to light up volume LED. At "power on", "H", and at "power off", "L".
58	EQ DEFEAT LED	Output to light up EQ defeat LED. At "EQ defeat on", "H" and at "EQ defeat off", "L".
59	SEG p	Output for segment.
60	SEG a	Output for segment.
61～65	SEG b～SEG f	Output, for segment, and data output for key scan.
66～70	SEG g～SEG m	Output for segment.
71	Vload	-30 V power supply of the FL controller.
72	SEG n	Output for segment.
73～80	DIGIT 15～DIGIT 8	Output for grid.

MECHANICAL PARTS LIST

Ref. No.	Description	Part No.	Q'ty	Version
	PACKAGE			
	Box Carton (AV-757)	049605258201	1	KS
	Box Carton (AX-747)	049605258202		KS
	Box Carton (AV-757)	049605258206	1	A,D,PTINDO
	Box Carton (AX-747)	049605258205	1	A,D,PTINDO
	Cushion Poly	9722041210	1	
	Film Soft PE	9715000120	1	
	CABINET & CHASSIS			
1	Volume, Motor	3228020010	1	
2	Cover, Top	046123017811	1	
3	FIP, 15BW16Y	2328130931	1	
4	Switch, Tact	4658003710	16	
5	Jack, Phone	4438005510	1	
6	Indicator, LED	8555051310	3	
7	Button, Power	048545181011	1	
8	Body, Front	048521009711	1	
9	Window, Display	048553023511	1	
10	Panel, Front (AV-757)	048602019811	1	
(10)	Panel, Front (AX-747)	048602019812	1	
11	Badge, INKEL	048535045411	1	KS
(11)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO
12	Knob, Volume	048643007611	1	
13	Button, Function	048543070011	1	
14	Button, EQ, Left	048545131111	1	
15	Button, EQ, Right	048545131121	1	
16	Button, EQ, Up/Down	048543070111	1	
17	Rubber Sponge	6715012010	1	
18	⚠ Power Transformer, 220 V, 60 Hz	2828100851	1	KS
(18)	⚠ Power Transformer, 230 V, 50 Hz	2828100931	1	D
(18)	⚠ Power Transformer, 110/220V, 50/60Hz	2828100921	1	PT INDO
(18)	⚠ Power Transformer, 120 V, 60 Hz	2828100951	1	A
19	Spacer, PCB	6705004220	1	
20	Chassis, Main	6121614910	1	
21	Rubber Foot	6035104410	2	
22	Fastener	6528301710	1	
23	Cushion, Foot	6715021230	2	
24	Terminal, Speaker, 4P (AV-757 ONLY)	4408105410	2	
25	Terminal, Speaker, 2P (AV-757 ONLY)	4408107010	1	
26	Fan, DC Brushless	5518103310	1	
27	Chassis, Back (AV-757)	046102044511	1	KS
(27)	Chassis, Back (AX-747)	046102044411	1	KS
(27)	Chassis, Back (AV-757)	046102044521	1	A
(27)	Chassis, Back (AX-747)	046102044421	1	A
(27)	Chassis, Back (AV-757)	046102044551	1	D
(27)	Chassis, Back (AX-747)	046102044451	1	D
(27)	Chassis, Back (AV-757)	046102044591	1	PT INDO
(27)	Chassis, Back (AX-747)	046102044491	1	PT INDO
28	Connector, Lead Ass'y	4358615503	1	
29	⚠ Cord, AC Power	4308009310	1	KS
(29)	⚠ Cord, AC Power	4308009220	1	A
(29)	⚠ Cord, AC Power	4308009520	1	D,PT INDO
30	Stopper, Connector	6518002210	1	
31	Stopper, Cord AC power	6518002310	1	
32	Plate, Ground	6165143510	1	A,D,KS
(32)	Switch, Slide	4618006510	1	PT INDO
33	Heatsink, Power	7503067220	1	
34	Heatsink, Regulator	7505206230	3	
35	Adapter	4428300410	1	PT INDO
(35)	Not Used !			A,D,KS
36	Jack RCA, 1P	4438113720	1	A,D,PT INDO
(36)	Not Used !			KS
	HARDWARE KIT			
S1	Screw, #B BTT 3x8B (AV-757)	8179130063	30	
(S1)	Screw, #B BTT 3x8B (AX-747)	8179130063	26	
S2	Screw, #B WPTT 3x6Y	8179230061	11	
S3	Screw, Heatsink AV-757)	8195000310	12	
(S3)	Screw, Heatsink (AX-747)	8195000310	6	
S4	Screw, #2 WPTC 3x10Y	8159230101	2	
S5	Screw, #2 WPTC 3x16Y	8159230161	1	
S6	Screw, Mecha	8155001210	1	
S7	Screw, #2 FTC 3x8B	8129230083	5	
S8	Screw, BSAM 4x8B	8109440083	4	
S9	Screw, BM 4x30B	8009140303	2	
S10	Screw, Ground	8155000710	2	D
(S10)	Not Used !			A,KS,PT INDO
N1	Nut, HEX Flanged M4Y	8209540011	1	

Ref. No.	Description	Part No.	Q'ty	Version
	MISCELLANEOUS			
	Card Cable, 21P, 220mm	4118621225	1	
	Card Cable, 21P, 120mm	4118621129	1	
PCB1	P.C.Board EQ	4005012710	1	
PCB2	P.C.Board Front	4005012700	1	
PCB3	P.C.Board Main	4001002800	1	
PCB4	P.C.Board Headphone	4001002820	1	
PCB5	P.C.Board Volume	4001002840	1	
PCB6	P.C.Board Volume LED	4001002830	1	
PCB7	P.C.Board Voltage	4001002810	1	

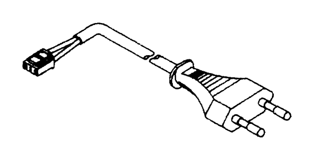
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list are of special significance to safety. When replacing a component identified with ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW

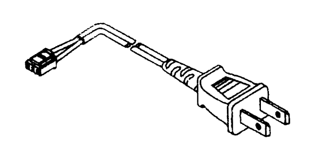
Model No. : AX-747/AV-757

KS



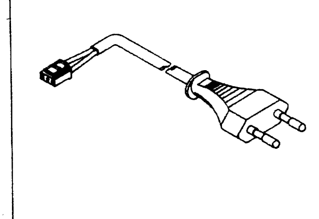
29 CORD AC POWER 4308009310 1

A



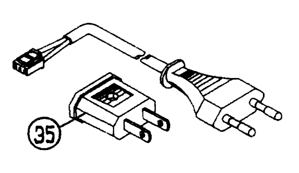
29 CORD AC POWER 4308009220 1

D



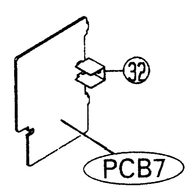
29 CORD AC POWER 4308009520 1

PT-INDO



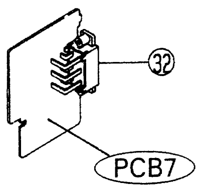
35 ADAPTER 4428300410 1
29 CORD AC POWER 4308009520 1

KS. A. D.



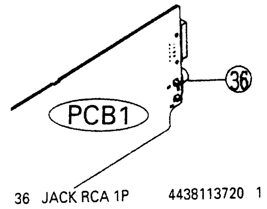
32 PLATE GROUND 6165143510 1

PT-INDO

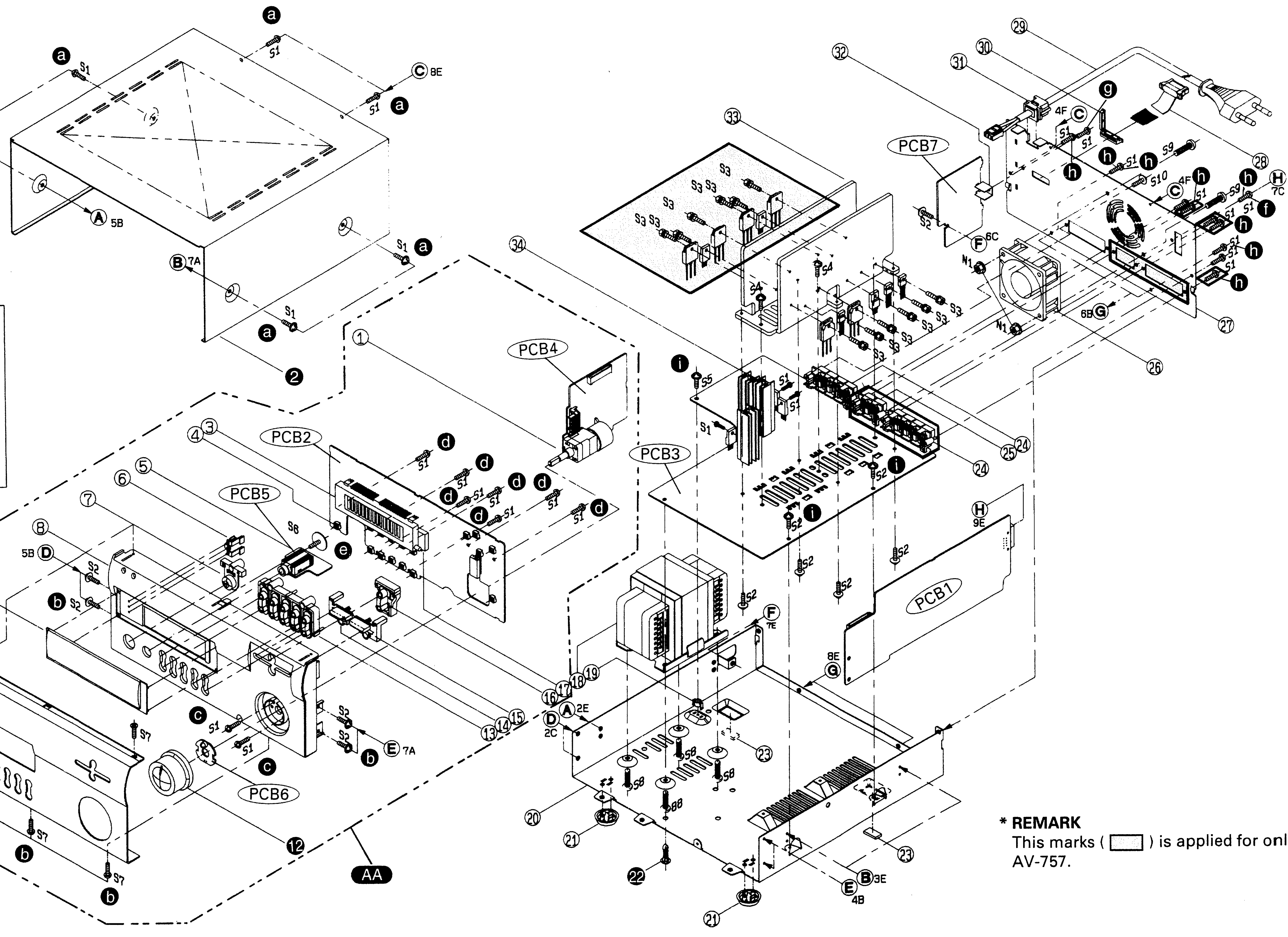


32 SW SLIDE(VOL) 4618006510 1

PT-INDO. A. D.



36 JACK RCA 1P 4438113720 1

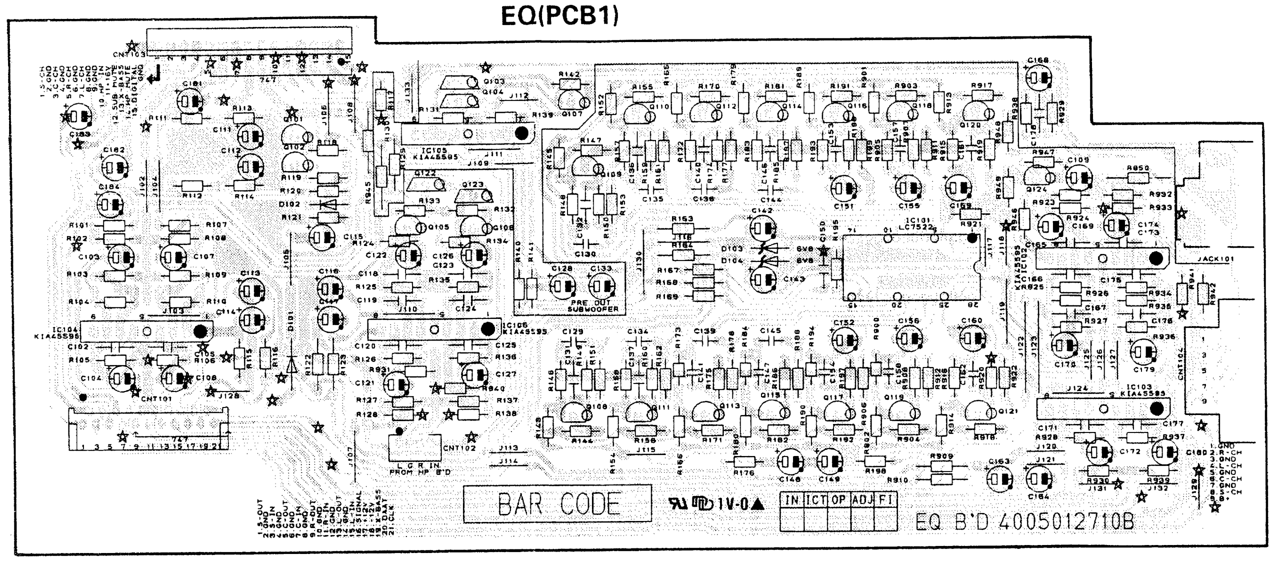

A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
a
S1
C 8E
A 5B
B 7A
2
1
PCB4
PCB2
PCB3
PCB5
PCB6
PCB7
PCB1
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
S2
S3
S4
S5
S6
S7
S8
S9
S10
N1
b
c
d
e
f
g
h
i
5B D
E 7A
A 2E
D 2C
F 7E
F 6C
G 8E
G 6B
H 9E
H 7C
C 4F
B 3E
E 4B
AA

*** REMARK**
This marks (☐) is applied for only AV-757.

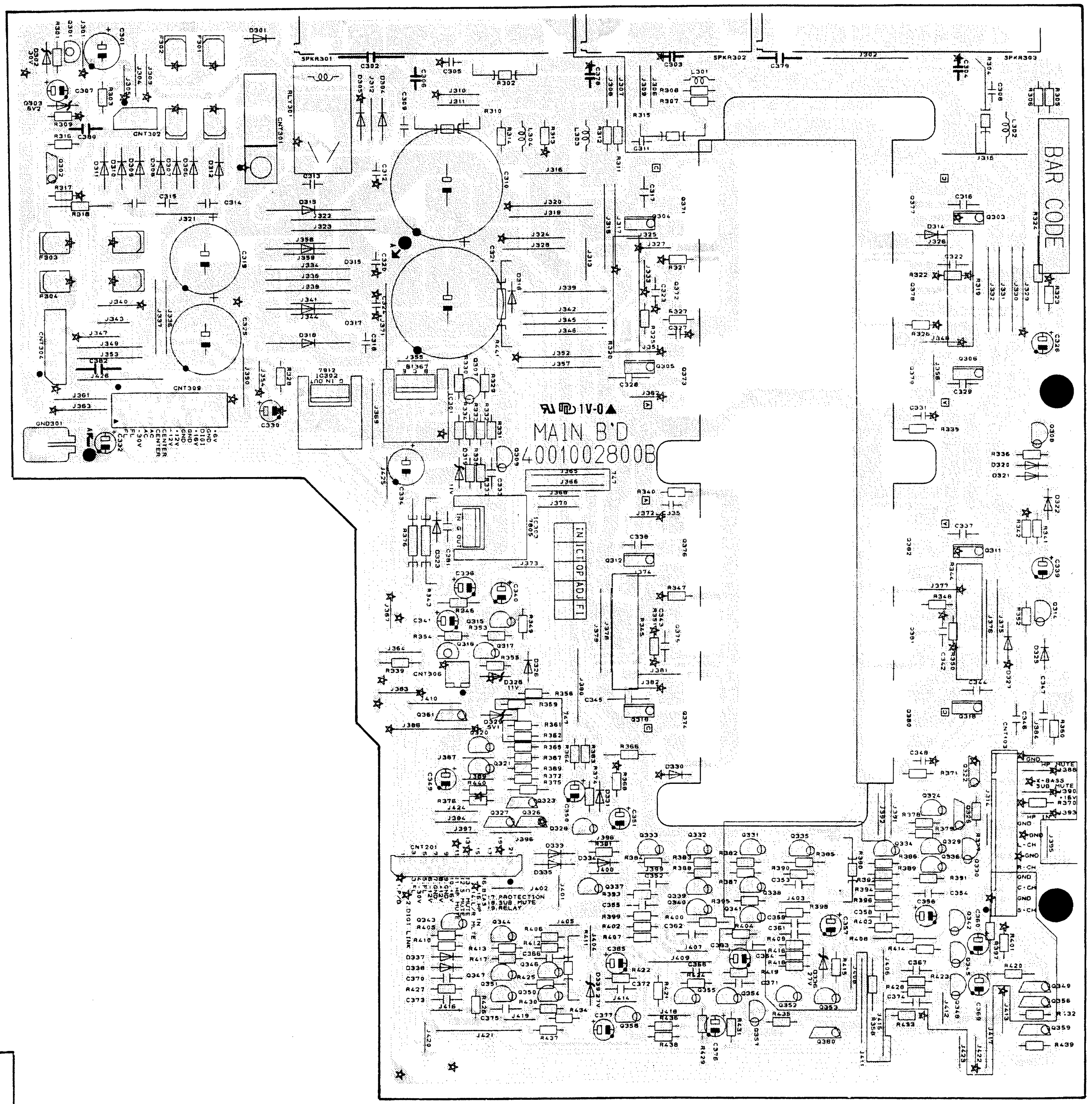
PRINTED CIRCUIT BOARDS

Model No. : AX-747/AV-757

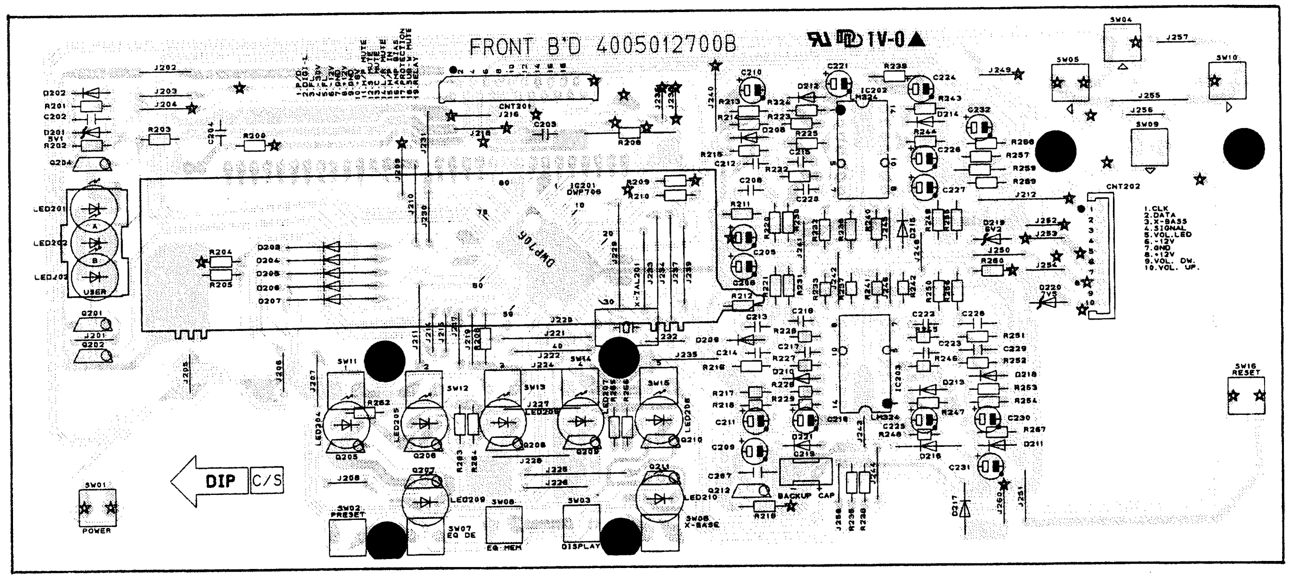
EQ(PCB1)


BAR CODE
1V-0▲
IN ICT OP ADJ FI
EQ B'D 4005012710B

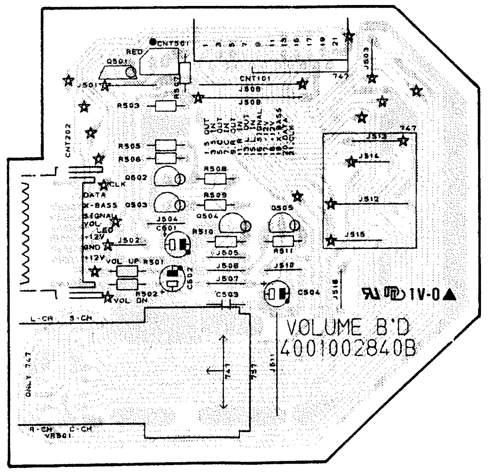
MAIN(PCB3)


BAR CODE
1V-0▲
MAIN B'D
4001002800B
IN ICT OP ADJ FI

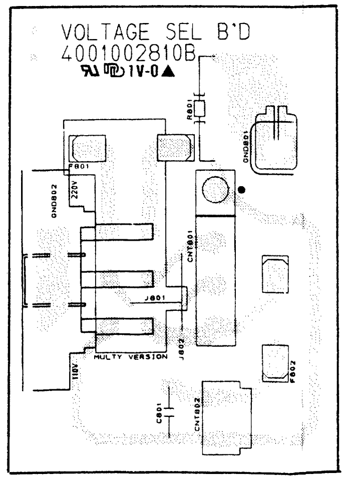
FRONT(PCB2)


FRONT B'D 4005012700B
1V-0▲
DIP C/S
POWER

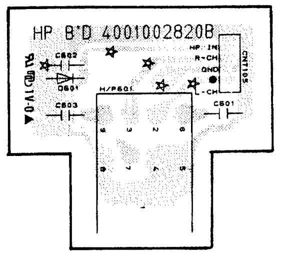
VOLUME(PCB4)


1V-0▲
VOLUME B'D
4001002840B

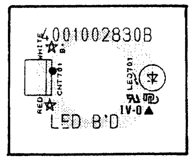
VOLTAGE SEL. (PCB7)


VOLTAGE SEL B'D
4001002810B
1V-0▲
MULTY VERSION

HEADPHONE(PCB5)


HP B'D 4001002820B

VOLUME LED(PCB6)


4001002830B
1V-0▲
LED B'D

ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE : Products marked with ⚠ have special characteristics important to safety.
If you replace any of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicing.
Resistor/Capacitor tolerance – D : (±0.5%), J : (±5%), K : (±10%), M : (±20%), Z : +80, – 20%)

Ref. No.	Description					Part No.	Q'ty	Version
PCB1	**ASSEMBLY P.C.BOARD EQ**							
	CAPACITORS							
C102	Ceramic Tubular	100	pF	50 V	M	3519101935	1	
C103/C104	Electrolytic SG	4.7	uF	50 V	M	3479347971	2	
C105	Ceramic Tubular	100	pF	50 V	M	3519101935	1	
C107-C109	Electrolytic SG	4.7	uF	50 V	M	3479347971	3	
C111/C112	Electrolytic SG	0.33	uF	50 V	M	3479333871	2	
C113/C114	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C115	Electrolytic SG	22	uF	25 V	M	3479222041	1	
C116/C117	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C118	Ceramic Tubular	820	pF	50 V	J	3519821935	1	
C119	Ceramic Tubular	100	pF	50 V	M	3519101935	1	
C120	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
C121	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C122	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C123	Ceramic Tubular	820	pF	50 V	J	3519821935	1	
C124	Ceramic Tubular	100	pF	50 V	M	3519101935	1	
C125	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
C126	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C127	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C128	Electrolytic SG	47	uF	16 V	M	3479347031	1	A,D,PT INDO
(C128)	Not Used !							KS
C129/C130	Mylar	0.0033	uF	100 V	J	3679332120	2	
C131/C132	Ceramic Tubular	330	pF	50 V	J	3519331935	2	
C133	Electrolytic SG	47	uF	16 V	M	3479347031	1	A,D,PT INDO
(C133)	Not Used !						1	KS
C134/C135	Mylar	0.0082	uF	100 V	J	3679822120	2	
C136/C137	Ceramic Tubular	820	pF	50 V	J	3519821935	2	
C138/C139	Mylar	0.02	uF	100 V	J	3679203120	2	
C140/C141	Mylar	0.0022	uF	100 V	J	3679222120	2	
C142/C143	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C144/C145	Mylar	0.0047	uF	100 V	J	3679472120	2	
C146/C147	Mylar	0.047	uF	100 V	J	3679473120	2	
C148/C149	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C150	Ceramic Tubular	100	pF	50 V	M	3519101935	1	
C151/C152	Electrolytic SG	0.1	uF	50 V	M	3479310871	2	
C153/C154	Mylar	0.015	uF	100 V	J	3679153120	2	
C155/C156	Electrolytic SG	0.22	uF	50 V	M	3479322871	2	
C157/C158	Mylar	0.0047	uF	100 V	J	3679472120	2	
C159/C160	Electrolytic SG	0.68	uF	50 V	M	3479368871	2	
C161/C162	Mylar	0.1	uF	63 V	K	3679104297	2	
C163/C164	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C165/C166	Ceramic Tubular	330	pF	50 V	J	3519331935	2	
C167	Ceramic Tubular	150	pF	50 V	J	3519151935	1	
C168	Electrolytic SG	22	uF	25 V	M	3479222041	1	A,D,PT INDO
(168)	Not Used !							KS
C169	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C170	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C171	Ceramic Tubular	47	pF	50 V	J	3519470935	1	
C172	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C173	Ceramic Tubular	330	pF	50 V	J	3519331935	1	
C174	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C175	Ceramic Tubular	330	pF	50 V	J	3519331935	1	
C176	Ceramic Tubular	150	pF	50 V	J	3519151935	1	
C177	Ceramic Tubular	47	pF	50 V	J	3519470935	1	
C178	Ceramic Tubular	100	pF	50 V	M	3519101935	1	A,D,PT INDO
(C178)	Not Used !							KS
C179/C180	Electrolytic SG	2.2	uF	50 V	M	3479322971	2	
C181-C184	Electrolytic SG	4.7	uF	50 V	M	3479347971	4	
C185-C187	Ceramic Tubular	0.047	uF	50 V	F	3519473935	3	
	CONNECTORS							
CNT102	Wafer, 4P					4428516310	1	
CNT103	Wafer, 15P					4428561520	1	
CNT104	Wafer, 9P					4428509820	1	
	DIODES							
D101/D102	1N4148, Switching					2058322101	2	
D103/D104	Zener, UZ 6.8 BSC					2258599121	2	
	INTEGRATED CIRCUITS							
IC101	LC7522					2168017122	1	
IC102-IC104	KIA4559S/KIA75559S					2168206103	3	

Ref. No.	Description					Part No.	Q'ty	Version
IC105	KIA4559S/KIA75559S					2168206103	1	A,D,PT INDO
(IC105)	Not Used !							KS
IC106	KIA4559S/KIA75559S					2168206103	1	
	TRANSISTORS							
Q101/Q102	KTC3198Y, NPN					2208606104	2	
Q103	DTC114YS					2208622106	1	A,D,PT INDO
(Q103)	Not Used !							KS
Q104	DTA114YS/KRM107M					2238006103	1	A,D,PT INDO
(Q104)	Not Used !							KS
Q105/Q106	KTC3198Y, NPN					2208606104	2	
Q107	KTD1302, NPN					2208606112	1	A,D,PT INDO
(Q107)	Not Used !							KS
Q108-Q121	KTC3198Y, NPN					2208606104	4	
Q122	DTA114YS/KRM107M					2238006103	1	
Q123	DTC114YS					2208622106	1	
Q124	KTC3198Y, NPN					2208606104	1	
	RESISTORS							
R101	Carbon Film	6.2	kohm	1/5 W	J	3069622970	1	
R102	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R103	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R104	Carbon Film	6.8	kohm	1/5 W	J	3069682970	1	
R105/R106	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R107	Carbon Film	6.2	kohm	1/5 W	J	3069622970	1	
R108	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R109	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R110	Carbon Film	6.8	kohm	1/5 W	J	3069682970	1	
R111/R112	Metal Film	1.5	kohm	1/5 W	J	3029152970	2	
R113/R114	Carbon Film	47	kohm	1/5 W	J	3069473970	2	
R115/R116	Metal Film	100	ohm	1/5 W	J	3029101970	2	
R117	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	A,D,PT INDO
(R117)	Not Used !							KS
R118/R119	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R120	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R121	Carbon Film	470	kohm	1/5 W	J	3069474970	1	
R122/R123	Metal Film	10	ohm	1/5 W	J	3029100970	2	
R124	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R125	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R126	Metal Film	3.9	kohm	1/5 W	J	3029392970	1	
R127	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R128	Metal Film	4.7	ohm	1/5 W	J	3029479970	1	
R129-R131	Metal Film	1	kohm	1/5 W	J	3029102970	3	A,D,PT INDO
(R129-R131)	Not Used !							KS
R132/R133	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R134	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R135	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R136	Metal Film	3.9	kohm	1/5 W	J	3029392970	1	
R137	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R138	Metal Film	4.7	ohm	1/5 W	J	3029479970	1	
R139	Metal Film	1	kohm	1/5 W	J	3029102970	1	A,D,PT INDO
(R139)	Not Used !							KS
R140/R141	Metal Film	100	ohm	1/5 W	J	3029101970	2	A,D,PT INDO
(R140/R141)	Not Used !							KS
R142	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	A,D,PT INDO
(R142)	Not Used !							KS
R143	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R144	Metal Film	390	ohm	1/5 W	J	3029391970	1	
R145	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R146	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R147	Metal Film	390	ohm	1/5 W	J	3029391970	1	
R148	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R149/R150	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R151	Carbon Film	820	kohm	1/5 W	J	3069824970	1	
R152	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R153	Carbon Film	820	kohm	1/5 W	J	3069824970	1	
R154	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R155/R156	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R157/R158	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R159/R160	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R161/R162	Carbon Film	820	kohm	1/5 W	J	3069824970	2	
R163	Metal Film	390	ohm	1/5 W	J	3029391970	1	
R164	Metal Film	470	ohm	1/5 W	J	3029471970	1	

Ref. No.	Description					Part No.	Q'ty	Version
R165/R166	Carbon Film	15	kohm	1/5 W	J	3069153970	2	
R167/R168	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R169	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R170/R171	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R172/R173	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R174/R175	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R176	Metal Film	180	ohm	1/5 W	J	3029181970	1	
R177/R178	Carbon Film	820	kohm	1/5 W	J	3069824970	2	
R179/R180	Carbon Film	15	kohm	1/5 W	J	3069153970	2	
R181/R182	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R183/R184	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R185/R186	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R187/R188	Carbon Film	820	kohm	1/5 W	J	3069824970	2	
R189/R190	Carbon Film	15	kohm	1/5 W	J	3069153970	2	
R191/R192	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R193/R194	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R195	Carbon Film	27	kohm	1/5 W	J	3069273970	1	
R196/R197	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R198	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R199	Carbon Film	820	kohm	1/5 W	J	3069824970	1	
R900	Carbon Film	820	kohm	1/5 W	J	3069824970	1	
R901/R902	Carbon Film	15	kohm	1/5 W	J	3069153970	2	
R903/R904	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R905/R906	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R907/R908	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R909/R910	Metal Film	100	ohm	1/5 W	J	3029101970	2	
R911/R912	Carbon Film	820	kohm	1/5 W	J	3069824970	2	
R913/R914	Carbon Film	15	kohm	1/5 W	J	3069153970	2	
R915/R916	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R917/R918	Metal Film	390	ohm	1/5 W	J	3029391970	2	
R919/R920	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R921/R922	Carbon Film	820	kohm	1/5 W	J	3069824970	2	
R923/R924	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R925	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R926	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R927	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R928	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R929	Carbon Film	100	kohm	1/5 W	J	3069104970	1	A,D,PT INDO
(R929)	Not Used !							KS
R930	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R931	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R932/R933	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R934	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R935	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R936	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R937	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R938	Metal Film	1	kohm	1/5 W	J	3029102970	1	A,D,PT INDO
(R938)	Not Used !							KS
R939	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R940	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R942	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R945	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R946	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R947	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R948	Carbon Film	27	kohm	1/5 W	J	3069273970	1	
R949	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R950	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
	MISCELLANEOUS							
36	Jack RCA, 1P					4438113720	1	A,D,PT INDO
(36)	Not Used !							KS
PCB2	**ASSEMBLY P.C.BOARD FRONT**							
	CAPACITORS							
C202	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
C203/C204	Mylar	0.0047	uF	100 V	J	3679472120	2	
C205/C206	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C207	Ceramic Tubular	0.047	uF	50 V	F	3519473935	1	
C208	Mylar	0.033	uF	100 V	J	3679331120	1	
C209	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C210/C211	Electrolytic SG	10	uF	50 V	M	3479310071	2	
C212	Mylar	0.033	uF	100 V	J	3679331120	1	
C213/C214	Mylar	0.015	uF	100 V	J	3679153120	2	
C215	Mylar	0.1	uF	100 V	J	3679332120	1	
C216/C217	Mylar	0.0056	uF	100 V	J	3679562120	2	
C218	Electrolytic SG	10	uF	50 V	M	3479310071	1	

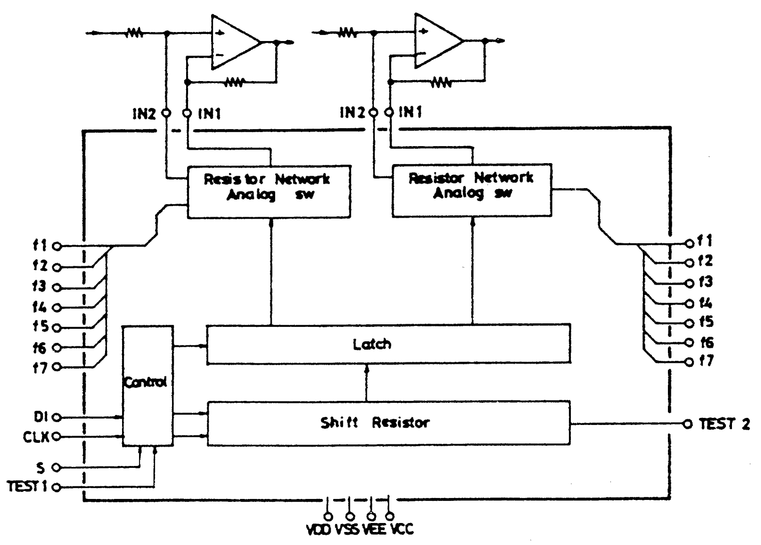
Ref. No.	Description					Part No.	Q'ty	Version
C219	Electrolytic	0.047	uF	5.5 V		3439247315	1	
C220	Mylar	0.1	uF	100 V	J	3679332120	1	
C221	Electrolytic SG	10	uF	50 V	M	3479310071	1	
C222/C223	Mylar	0.0022	uF	100 V	J	3679222120	2	
C224/C225	Electrolytic SG	10	uF	50 V	M	3479310071	2	
C226/C227	Electrolytic SG	0.22	uF	50 V	M	3479322871	2	
C228/C229	Ceramic Tubular	820	pF	50 V	J	3519821935	2	
C230	Electrolytic SG	10	uF	50 V	M	3479310071	1	
C231	Electrolytic SG	0.47	uF	50 V	M	3479347971	1	
C232	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
	CONNECTORS							
CNT201	Wafer, FPC, 21P					4428526330	1	
CNT202	Wafer, 10P					4428810996	1	
	DIODES							
D201	Zener, UZ 5.1 BSB					2258599103	1	
D202-D218	1N4148, Switching					2058322101	17	
D219	Zener, UZ 6.2BSB					2258599105	1	
D220	Zener, UZ 7.5 BSC					2258599130	1	
D221	1N4148, Switching					2058322101	1	
LED201-203	LED, SLR-34URCF25, Red					2371124701	3	
LED204-208	LED, SLR-34GCF25, Green					2371124301	5	
LED209/210	LED, SLR-34URCF25, Red					2371124701	2	
	INTEGRATED CIRCUITS							
IC201	uPD78042					2139313111	1	
IC202/203	KA324					2168000113	2	
	TRANSISTORS							
Q201-Q212	DTC114YS					2208622106	12	
	RESISTORS							
R200	Metal Film	3.3	ohm	1/5 W	J	3029339970	1	
R201	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R202	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R203	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R204/R205	Carbon Film	10	kohm	1/5 W	J	3069103970	2	
R206	Metal Film	3.3	ohm	1/5 W	J	3029339970	1	
R208	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R209/R210	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R211/R212	Carbon Film	62	kohm	1/5 W	J	3069623970	2	
R213	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R214	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R215/R216	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R217	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R218	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R219	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R220/R221	Carbon Film	20	kohm	1/5 W	J	3069203970	2	
R222	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R223	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R224	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R225	Carbon Film	62	kohm	1/5 W	J	3069623970	1	
R226	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R227	Carbon Film	62	kohm	1/5 W	J	3069623970	1	
R228	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R229	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R230/R231	Carbon Film	20	kohm	1/5 W	J	3069203970	2	
R232/R233	Carbon Film	62	kohm	1/5 W	J	3069623970	2	
R235	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R236/R237	Carbon Film	62	kohm	1/5 W	J	3069623970	2	
R238	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R239	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R240-R242	Carbon Film	62	kohm	1/5 W	J	3069623970	3	
R243	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R244	Carbon Film	62	kohm	1/5 W	J	3069623970	1	
R245	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R246	Carbon Film	62	kohm	1/5 W	J	3069623970	1	
R247	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R248	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R249/R250	Carbon Film	20	kohm	1/5 W	J	3069203970	2	
R251	Carbon Film	75	kohm	1/5 W	J	3069753970	1	
R252	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R253	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R254/R255	Metal Film	100	ohm	1/5 W	J	3029101970	2	
R256	Carbon Film	20	kohm	1/5 W	J	3069203970	1	
R257	Carbon Film	680	kohm	1/5 W	J	3069684970	1	

Ref. No.	Description					Part No.	Q'ty	Version
R259	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R260	Carbon Film	20	kohm	1/5 W	J	3069203970	1	
R262-R266	Metal Film	270	ohm	1/5 W	J	3029271970	5	
R267	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R268	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R269	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
	MISCELLANEOUS							
X-TAL201	Crystal, CST4.19MHz					3938101880	1	
3	FIP, 15BW16Y					2328130931	1	
4	Switch, Tact					4658003710	16	
PCB3	**ASSEMBLY P.C.BOARD MAIN**							
	CAPACITORS							
C301	Electrolytic SG	47	uF	50 V	M	3479347071	1	
C302-C304	Not Used !							
C305	Mylar	0.047	uF	100 V	J	3679473120	3	
C306	Not Used !							
C307	Electrolytic SG	10	uF	50 V	M	3479310071	1	
C308	Mylar	0.047	uF	100 V	J	3679473120	1	
(C308)	Not Used ! (AX-747)							
C309	Mylar	0.047	uF	100 V	J	3679473120	1	
C310	Electrolytic HS	4700	uF	50 V	M	3419547225	1	
C311	Mylar	0.047	uF	100 V	J	3679473120	1	
(C311)	Not Used ! (AX-747)							
C312-C315	Mylar	0.047	uF	100 V	J	3679473120	4	
C316.	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
(C316)	Not Used ! (AX-747)							
C317	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
C318	Mylar	0.047	uF	100 V	J	3679473120	1	
C319	Electrolytic SD	4700	uF	25 V	M	3409347248	1	
C321	Electrolytic HS	4700	uF	50 V	M	3419547225	1	
C322	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
(C322)	Not Used ! (AX-747)							
C323	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
C325	Electrolytic SG	2200	uF	25 V	M	3409322249	1	
C326	Electrolytic SG	10	uF	50 V	M	3479310071	1	
(C326)	Not Used ! (AX-747)							
C327	Mylar	0.047	uF	100 V	J	3679473120	1	
C328	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
C329	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
(C329)	Not Used ! (AX-747)							
C330	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C331	Mylar	0.047	uF	100 V	J	3679473120	1	
(C331)	Not Used ! (AX-747)							
C332	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C333	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
C334	Electrolytic SG	220	uF	16 V	M	3479322131	1	
C335	Mylar	0.047	uF	100 V	J	3679473120	1	
C337	Ceramic Tubular	220	pF	50 V	J	3519221935	2	
(C337)	Not Used ! (AX-747)							
C338	Ceramic Tubular	220	pF	50 V	J	3519221935	2	
C339	Electrolytic SG	10	uF	50 V	M	3479310071	1	
(C339)	Not Used ! (AX-747)							
C340/C341	Electrolytic SG	10	uF	50 V	M	3479310071	2	
C342	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
(C342)	Not Used ! (AX-747)							
C343	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
C344	Ceramic Tubular	220	pF	50 V	J	3519221935	2	
(C344)	Not Used ! (AX-747)							
C345	Ceramic Tubular	220	pF	50 V	J	3519221935	2	
C346	Ceramic Tubular	12	pF	50 V	J	3519120935	1	
(C346)	Not Used ! (AX-747)							
C347	Ceramic Tubular	3.3	pF	50 V	J	3519033935	1	
(C347)	Not Used ! (AX-747)							
C348	Mylar	0.047	uF	100 V	J	3679473120	1	
(C348)	Not Used ! (AX-747)							
C349	Electrolytic SA	470	uF	6.3 V	M	3479247111	1	
C350/C351	Electrolytic SG	10	uF	50 V	M	3479310071	2	
C352	Ceramic Tubular	12	pF	50 V	J	3519120935	2	
C353	Ceramic Tubular	12	pF	50 V	J	3519120935	2	
(C353)	Not Used ! (AX-747)							
C354	Ceramic Tubular	27	pF	50 V	J	3519270935	1	
(C354)	Not Used ! (AX-747)							
C355	Ceramic Tubular	3.3	pF	50 V	J	3519033935	1	
C356/C357	Electrolytic SG	47	uF	16 V	M	3479347031	2	
(C356/C357)	Not Used ! (AX-747)							
C358	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
(C358)	Not Used ! (AX-747)							
C359	Ceramic Tubular	3.3	pF	50 V	J	3519033935	1	
(C359)	Not Used ! (AX-747)							
C360	Electrolytic SG	0.47	uF	50 V	M	3479347971	1	
(C360)	Not Used ! (AX-747)							
C361	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
(C361)	Not Used ! (AX-747)							
C362	Ceramic Tubular	27	pF	50 V	J	3519270935	1	
C363	Not Used ! (AX-747)							
C364/C365	Electrolytic SG	0.47	uF	50 V	M	3479347971	2	
C366	Ceramic Tubular	27	pF	50 V	J	3519270935	1	
C367	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
(C367)	Not Used ! (AX-747)							
C368	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
C369	Electrolytic SG	0.47	uF	50 V	M	3479347971	1	
(C369)	Not Used ! (AX-747)							
C370	Ceramic Tubular	12	pF	50 V	J	3519120935	1	
C371/C372	Ceramic Tubular	470	pF	50 V	J	3519471935	2	
C373	Ceramic Tubular	3.3	pF	50 V	J	3519033935	1	
C374	Ceramic Tubular	470	pF	50 V	J	3519471935	1	
(C374)	Not Used ! (AX-747)							
C375	Ceramic Tubular	0.001	uF	50 V	M	3519102935	1	
C376/C377	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C378-C379	Not Used !							
C381	Ceramic Tubular	0.1	uF	50 V	F	3519104935	1	
C382	Not Used !							
	CONNECTORS							
CNT201	Wafer, FPC, 21P					4428526330	1	
CNT301	Wafer LV, 3P					4428525790	1	
CNT302	Wafer, 3P					4428505710	1	
CNT304	Wafer, 6P					4428505810	1	
CNT306	Wafer, 2P					4428508210	1	
CNT307	Wafer, 15P					4428551520	1	
CNT309	Wafer, 15P					4428525360	1	
	DIODES							
D301	1N4148, Switching					2058322101	1	
D302	Zener, UZ 30.0 BSD					2258599128	1	
D303	Zener, UZ 6.2 BSB					2258599105	1	
D304-D312	1N4003, Rectifier					2258128002	9	
D313	1N5402, Rectifier					2058100136	1	
D314	1N4148, Switching					2058322101	1	
(D314)	Not Used ! (AX-747)							
D315	1N5402, Rectifier					2058100136	1	
D316	1N4148, Switching					2058322101	1	
D317/D318	1N5402, Rectifier					2058100136	2	
D319	Zener, UZ 11.0 BSC					2258599122	1	
D320-D324	1N4148, Switching					2058322101	5	
(D320-D324)	Not Used ! (AX-747)							
D325	1N4148, Switching					2058322101	1	
(D325)	Not Used ! (AX-747)							
D326	1N4148, Switching					2058322101	1	
D327	1N4148, Switching					2058322101	1	
(D327)	Not Used ! (AX-747)							
D328	Zener, UZ 11.0 BSC					2258599122	1	
D329	Zener, UZ 5.1 BSB					2258599103	1	
D330-D335	1N4148, Switching					2058322101	6	
D336	Zener, UZ 27 BSC					2258599115	1	
(D336)	Not Used ! (AX-747)							
D337/D338	1N4148, Switching					2058322101	2	
D339	Zener, UZ 27 BSC					2258599115	1	
	INTEGRATED CIRCUITS							
IC301	KTB1367Y/2SB1367Y, NPN					2028106109	1	
IC302	KA7912, Regulator					2168602113	1	
IC303	KA7805, Regulator					2108499104	1	
	COILS							
L301/L302	Inductor, 0.5 uH					2648001010	2	
(L301/L302)	Not Used ! (AX-747)							
L303/L304	Inductor, 0.5 uH					2648001010	2	
	TRANSISTORS							
Q301	MPSA56Y, PNP					2208206113	1	
Q302	DTC114YS					2208622106	1	
Q303	KSC2690, NPN					2008602102	1	
(Q303)	Not Used ! (AX-747)							
Q304	KSC2690, NPN					2008602102	1	
Q305	KSA1220, PNP					2008202101	1	
Q306	KSA1220, PNP					2008202101	1	
(Q306)	Not Used ! (AX-747)							
Q307	KTC3198Y, NPN					2208606104	1	
Q308	KTC3198Y, NPN					2208606104	1	
(Q308)	Not Used ! (AX-747)							
Q309	KTC3198Y, NPN					2208606104	1	
Q311	KSA1220, PNP					2008202101	1	
(Q311)	Not Used ! (AX-747)							
Q312	KSA1220, PNP					2008202101	1	
Q314/Q315	KTC3198Y, NPN					2208606104	2	
Q316	MPSA56Y, PNP					2208206113	1	
Q317	KTC3198Y, NPN					2208606104	1	
Q318	KSC2690, NPN					2008602102	1	
(Q318)	Not Used ! (AX-747)							
Q319	KSC2690, NPN					2008602102	1	
Q320/Q321	KTC3198Y, NPN					2208606104	2	
Q322	DTC114YS					2208622106	1	
(Q322)	Not Used ! (AX-747)							
Q323	DTA114YS/KRM107M					2238006103	1	
Q324	KTA1024, PNP					2208206115	1	
(Q324)	Not Used ! (AX-747)							
Q325	DTA114YS/KRM107M					2238006103	1	
(Q325)	Not Used ! (AX-747)							
Q326	DTC114YS					2208622106	1	
Q327	DTA114YS/KRM107M					2238006103	1	
Q328	KTC3198Y, NPN					2208606104	1	
Q329	KTC3198Y, NPN					2208606104	1	
(Q329)	Not Used ! (AX-747)							
Q330	KTD1302, NPN					2208606112	1	
(Q330)	Not Used ! (AX-747)							
Q331	KTA1024, PNP					2208206115	1	
(Q331)	Not Used ! (AX-747)							
Q332	KTA1024, PNP					2208206115	1	
Q333	KTC3206, NPN					2208606118	1	
Q334/Q335	KTC3206, NPN					2208606118	2	
(Q334/Q335)	Not Used ! (AX-747)							
Q336	KTC3198Y, NPN					2208606104	1	
(Q336)	Not Used ! (AX-747)							
Q337	KTC3198Y, NPN					2208606104	1	
Q338	KTC3198Y, NPN					2208606104	1	
(Q338)	Not Used ! (AX-747)							
Q339/Q340	KTC3198Y, NPN					2208606104	2	
Q341	KTC3198Y, NPN					2208606104	1	
(Q341)	Not Used ! (AX-747)							
Q342	KTC2240/BKTC3200, NPN					2208606108	1	
(Q342)	Not Used ! (AX-747)							
Q343	KTC3206, NPN					2208606118	1	
Q344	KTA1024, PNP					2208206115	1	
Q345	KTC2240/BKTC3200, NPN					2208606108	1	
(Q345)	Not Used ! (AX-747)							
Q346/Q347	KTC3198Y, NPN					2208606104	2	
Q348	KTD1302, NPN					2208606112	1	
(Q348)	Not Used ! (AX-747)							
Q349	DTA114YS/KRM107M					2238006103	1	
(Q349)	Not Used ! (AX-747)							
Q350/Q351	KTC2240/BKTC3200, NPN					2208606108	2	
Q352-Q355	KTC2240/BKTC3200, NPN					2208606108	4	
(Q352-Q355)	Not Used ! (AX-747)							
Q356	DTC114YS					2208622106	1	
(Q356)	Not Used ! (AX-747)							
Q357/Q358	KTD1302, NPN					2208606112	2	
Q359	DTC114YS					2208622106	1	
Q360/Q361	DTA114YS/KRM107M					2238006103	2	
Q371	2SD718/KTD718, NPN					2028407109	1	
Q372	2SC4137, Bias					2008622110	1	
Q373	2SB688/KTB688, PNP					2028107106	1	
Q374	2SD718/KTD718, NPN					2028407109	1	
Q375	2SC4137, Bias					2008622110	1	
Q376	2SB688/KTB688, PNP					2028107106	1	
Q377	2SD2059/KTD2059, NPN					2028406123	1	
Q378	2SC4137, Bias					2008622110	1	
Q379	KTB1367Y/2SB1367Y, NPN					2028106109	1	
Q380	2SD718/KTD718, NPN					2028407109	1	
Q381	2SC4137, Bias					2008622110	1	
Q382	2SB688/KTB688, PNP					2028107106	1	
	RESISTORS							
R301	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R302	Metal Film	10	ohm	1 W	J	3029100470	1	
R303	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R304	Mylar	0.047	uF	100 V	J	3679473120	1	
(R304)	Not Used ! (AX-747)							
R305-R308	Metal Film	22	ohm	1/5 W	J	3029220970	4	
(R305-R308)	Not Used ! (AX-747)							
R309	Carbon Film	20	kohm	1/5 W	J	3069203970	1	
R310	Metal Film	10	ohm	1 W	J	3029100470	1	
R311-R314	Metal Film	22	ohm	1/5 W	J	3029220970	14	
R315	Metal Film	10	ohm	1 W	J	3029100470	1	
(R315)	Not Used ! (AX-747)							
R316	Metal Film	180	ohm	1/5 W	J	3029181970	1	
R317	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R318	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R319	Cement	0.39	ohm	5 W	J	3059039776	1	
(R319)	Not Used ! (AX-747)							
R320	Cement	0.39	ohm	5 W	J	3059039776	1	
R321	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R322	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
(R322)	Not Used ! (AX-747)							
R323	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
(R323)	Not Used ! (AX-747)							
R324	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R325	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
R326	Metal Film	1	kohm	1/5 W	J	3029102970	1	
(R326)	Not Used ! (AX-747)							
R327	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R328	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R329	Metal Film	470	ohm	1/5 W	J	3029471970	1	
R330	Metal Film	47	ohm	1/5 W	J	3029470970	1	
R331	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R332	Metal Film	470	ohm	1/5 W	J	3029471970	1	
R333	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R334	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R335	Metal Film	220	ohm	1/5 W	J	3029221970	1	
(R335)	Not Used ! (AX-747)							
R336	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
(R336)	Not Used ! (AX-747)							
R337	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R338	Metal Film	470	ohm	1/5 W	J	3029471970	1	
R339	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R340	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R341	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
(R341)	Not Used ! (AX-747)							
R342	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
(R342)	Not Used ! (AX-747)							
R343	Metal Film	33	ohm	1 W	J	3029330570	1	
R344	Cement	0.39	ohm	5 W	J	3059039776	1	
(R344)	Not Used ! (AX-747)							
R345	Cement	0.39	ohm	5 W	J	3059039776	1	
R346	Metal Film	22	ohm	1/5 W	J	3029220970	1	
R347	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R348	Metal Film	1	kohm	1/5 W	J	3029102970	1	
(R348)	Not Used ! (AX-747)							
R349	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R350	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
(R350)	Not Used ! (AX-747)							
R351	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
R352	Metal Film	330	ohm	1/5 W	J	3029331970	1	
(R352)	Not Used ! (AX-747)							
R353	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R354	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R355	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R356	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R358	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
(R358)	Not Used ! (AX-747)							
R359	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
(R359)	Not Used ! (AX-747)							
R360	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
(R360)	Not Used ! (AX-747)							
R361/R362	Carbon Film	12	kohm	1/5 W	J	3069123970	2	

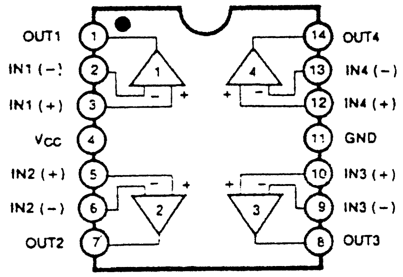
Ref. No.	Description	Part No.	Q'ty	Version
(R361/R362)	Not Used ! (AX-747)			
R363	Metal Film 330 ohm 1/5 W J	3029331970	1	
R364	Metal Film 4.7 kohm 1/5 W J	3029472970	1	
R365	Carbon Film 12 kohm 1/5 W J	3069123970	1	
R366	Metal Film 330 ohm 1/5 W J	3029331970	1	
R367	Carbon Film 12 kohm 1/5 W J	3069123970	1	
R368	Metal Film 4.7 kohm 1/5 W J	3029472970	1	
R369	Carbon Film 6.8 kohm 1/5 W J	3069682970	1	
R370	Metal Film 4.7 kohm 1/5 W J	3029472970	1	
R371	Metal Film 220 ohm 1/5 W J	3029221970	1	
(R371)	Not Used ! (AX-747)			
R372	Carbon Film 6.8 kohm 1/5 W J	3069682970	1	
R374	Carbon Film 15 kohm 1/5 W J	3069153970	1	
R375	Carbon Film 10 kohm 1/5 W J	3069103970	1	
R376/R377	Metal Film 3.3 kohm 1/5 W J	3029332970	2	
R378	Metal Film 120 ohm 1/5 W J	3029121970	1	
(R378)	Not Used ! (AX-747)			
R379	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R379)	Not Used ! (AX-747)			
R380	Metal Film 2.2 kohm 1 W J	3029222470	1	
(R380)	Not Used ! (AX-747)			
R381	Carbon Film 15 kohm 1/5 W J	3069153970	1	
R382	Metal Film 120 ohm 1/5 W J	3029121970	1	
(R382)	Not Used ! (AX-747)			
R383	Metal Film 120 ohm 1/5 W J	3029121970	1	
R384	Metal Film 3.3 kohm 1/5 W J	3029332970	1	
R385/R386	Metal Film 120 ohm 1/5 W J	3029121970	2	
(R385/R386)	Not Used ! (AX-747)			
R387	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R387)	Not Used ! (AX-747)			
R388	Metal Film 1 kohm 1/5 W J	3029102970	1	
R389/R390	Metal Film 3.3 kohm 1/5 W J	3029332970	2	
(R389/R390)	Not Used ! (AX-747)			
R391	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R391)	Not Used ! (AX-747)			
R392	Carbon Film 10 kohm 1/5 W J	3069103970	1	
(R392)	Not Used ! (AX-747)			
R393	Carbon Film 33 kohm 1/5 W J	3069333970	1	
R394	Carbon Film 2 kohm 1/5 W J	3069202970	1	
(R394)	Not Used ! (AX-747)			
R395	Carbon Film 10 kohm 1/5 W J	3069103970	1	
(R395)	Not Used ! (AX-747)			
R396	Carbon Film 2 kohm 1/5 W J	3069202970	1	
(R396)	Not Used ! (AX-747)			
R397	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R397)	Not Used ! (AX-747)			
R398	Carbon Film 33 kohm 1/5 W J	3069333970	1	
(R398)	Not Used ! (AX-747)			
R399	Carbon Film 10 kohm 1/5 W J	3069103970	1	
R400	Metal Film 1 kohm 1/5 W J	3029102970	1	
R401	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R401)	Not Used ! (AX-747)			
R402	Carbon Film 2 kohm 1/5 W J	3069202970	1	
R403	Metal Film 390 ohm 1/5 W J	3029391970	1	
(R403)	Not Used ! (AX-747)			
R404	Metal Film 1 kohm 1/5 W J	3029102970	1	
(R404)	Not Used ! (AX-747)			
R405	Metal Film 120 ohm 1/5 W J	3029121970	1	
R406	Carbon Film 10 kohm 1/5 W J	3069103970	1	
R407	Carbon Film 2 kohm 1/5 W J	3069202970	1	
R408	Carbon Film 33 kohm 1/5 W J	3069333970	1	
(R408)	Not Used ! (AX-747)			
R409	Metal Film 390 ohm 1/5 W J	3029391970	1	
(R409)	Not Used ! (AX-747)			
R410	Metal Film 3.3 kohm 1/5 W J	3029332970	1	
R411	Metal Film 2.2 kohm 1 W J	3029222470	1	
R412	Metal Film 1 kohm 1/5 W J	3029102970	1	
R413	Metal Film 120 ohm 1/5 W J	3029121970	1	
R414/R415	Metal Film 1.2 kohm 1/5 W J	3029122970	2	
(R414/R415)	Not Used ! (AX-747)			
R416	Carbon Film 2 kohm 1/5 W J	3069202970	1	
(R416)	Not Used ! (AX-747)			
R417	Metal Film 1 kohm 1/5 W J	3029102970	1	
R418	Carbon Film 2 kohm 1/5 W J	3069202970	1	
(R418)	Not Used ! (AX-747)			
R419	Carbon Film 33 kohm 1/5 W J	3069333970	1	
R420	Metal Film 3.3 kohm 1/5 W J	3029332970	1	
(R420)	Not Used ! (AX-747)			
R421	Metal Film 120 ohm 1/5 W J	3029121970	1	
R422	Carbon Film 33 kohm 1/5 W J	3069333970	1	
R423	Carbon Film 33 kohm 1/5 W J	3069333970	1	
(R423)	Not Used ! (AX-747)			
R424	Metal Film 390 ohm 1/5 W J	3029391970	1	
R425	Carbon Film 2 kohm 1/5 W J	3069202970	1	
R426/R427	Carbon Film 33 kohm 1/5 W J	3069333970	2	
R428	Carbon Film 33 kohm 1/5 W J	3069333970	1	
(R428)	Not Used ! (AX-747)			
R429	Metal Film 1.8 kohm 1/5 W J	3029182970	1	
R430	Metal Film 390 ohm 1/5 W J	3029391970	1	
R431	Carbon Film 33 kohm 1/5 W J	3069333970	1	
R432	Metal Film 4.7 kohm 1/5 W J	3029472970	1	
(R432)	Not Used ! (AX-747)			
R433	Metal Film 1 kohm 1/5 W J	3029102970	1	
R434	Carbon Film 2 kohm 1/5 W J	3069202970	1	
R435/R436	Metal Film 3.3 kohm 1/5 W J	3029332970	2	
R437	Metal Film 1.8 kohm 1/5 W J	3029182970	1	
R438	Metal Film 1 kohm 1/5 W J	3029102970	1	
R439	Metal Film 4.7 kohm 1/5 W J	3029472970	1	
R440	Metal Film 1 kohm 1/5 W J	3029102970	1	
	FUSES			
F301/302	⚠ T 1.6 A, 250 V	5508302335	2	A,D,PT INDO
(F301/302)	⚠ NB 1.5 A, 250 V	5508202230	2	KS
F303/304	⚠ T 1 A, 250 V	5508302035	2	A,D,PT INDO
(F303/304)	⚠ NB 1 A, 250 V	5508100851	2	KS
	MISCELLANEOUS			
RLY301	⚠ Relay, OSA-SS-212DM3	5528001750	1	
GND301	Terminal Ground	4235007310	1	
24	Terminal, Speaker, 4P	4408105410	2	
25	Terminal, Speaker, 2P	4408107010	1	
34	Heatsink, Regulator	7505206230	3	
PCB4	**ASSEMBLY P.C.BOARD VOLUME**			
	CAPACITORS			
C501	Electrolytic SG 100 uF 16 V M	3479310131	1	
C502	Electrolytic SG 47 uF 16 V M	3479347031	1	
C503	Ceramic Tubular 0.01 uF 16 V M	3519103915	1	
C504	Electrolytic SG 47 uF 16 V M	3479347031	1	
	CONNECTORS			
CNT501	Wafer, 2P	4428508210	1	
CNT202	Wafer, 10P	4428810995	1	
CNT101	Wafer, 21P	4428526750	1	
	TRANSISTORS			
Q501	DTC114YS	2208622106	1	
Q502/Q503	KTA1015Y/BKTA1266, PNP	2208206105	2	
Q504/Q505	KTC3198Y, NPN	2208606104	2	
	RESISTORS			
R501/R502	Metal Film 1 kohm 1/5 W J	3029102970	2	
R503	Metal Film 220 ohm 1/5 W J	3029221970	1	
R505/R506	Metal Film 1 kohm 1/5 W J	3029102970	2	
R507	Metal Film 1.5 kohm 1/5 W J	3029152970	1	
R508/R509	Metal Film 1 kohm 1/5 W J	3029102970	2	
R510/R511	Metal Film 4.7 kohm 1/5 W J	3029472970	2	
	MISCELLANEOUS			
VR501	Semi Fixed Resistor, 50 k(B)	3248050353	1	
1	Volume, Motor	3228020010	1	
PCB5	**ASSEMBLY P.C.BOARD HEADPHONE**			
C601-C603	CAP, Ceramic Tu 0.022 pF 25 V J	3519223520	3	
CNT105	Connector, Lead Ass'y, 4P, 300mm	436204303332	1	
D601	Diode, 1N4148, Switching	2058322101	1	
5	Jack, Phone	4438005510	1	
PCB6	**ASSEMBLY P.C.BOARD VOLUME LED**			
CNT701	Connector, Lead Ass'y, 2P, 140mm	435102143481	1	
LED701	LED, SLH-34K-3	2308220142	1	
PCB7	**ASSEMBLY P.C.BOARD VOLTAGE**			
C801	Not Used !			
CNT801	Connector, Wafer LV, 4P	4428525780	1	A,D,PT INDO
(CNT801)	Connector, Wafer LV, 2P	4428525800	1	PT INDO
CNT802	Connector, Wafer LV, 2P	4428100291	1	
F801	⚠ Fuse, T 2A, 250V	5508302435	1	PT INDO
(F801)	Not Used !			A,D,KS
F802	⚠ Fuse, T 3.15A, 250V	5508302735	1	A,D,KS
(F802)	⚠ Fuse, NB 3.5A, 250V	5508202830	1	PT INDO
32	Plate, Ground	6165143510	1	A,D,KS
(32)	Switch, Slide	4618006510	1	PT INDO

IC FUNCTIONAL BLOCK DIAGRAM

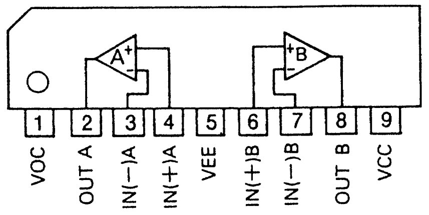
IC101 : LC7522



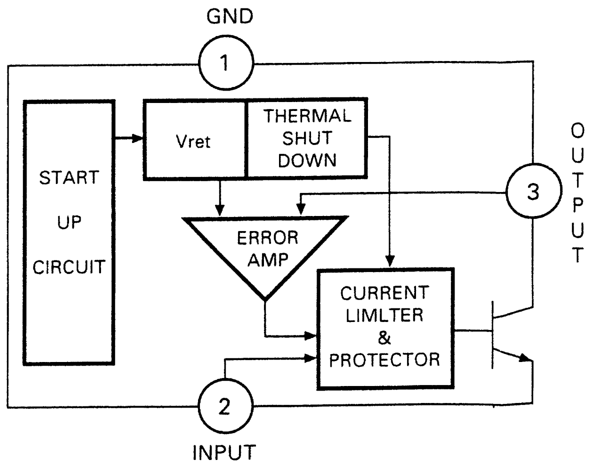
IC102/IC103 : KA324



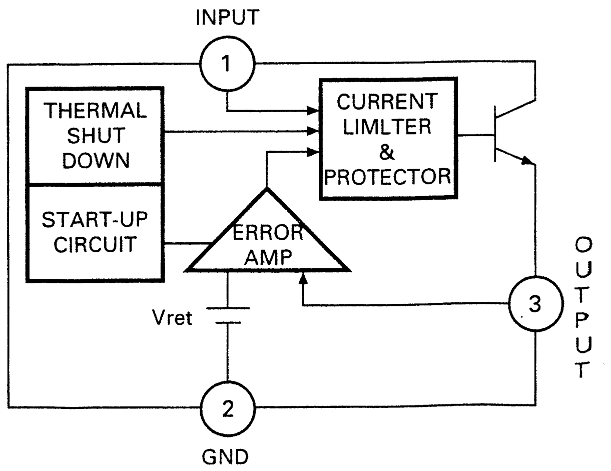
IC102, IC103, IC104, IC105, IC106 : KIA4559S/KIA75559S



IC302 : KA7912

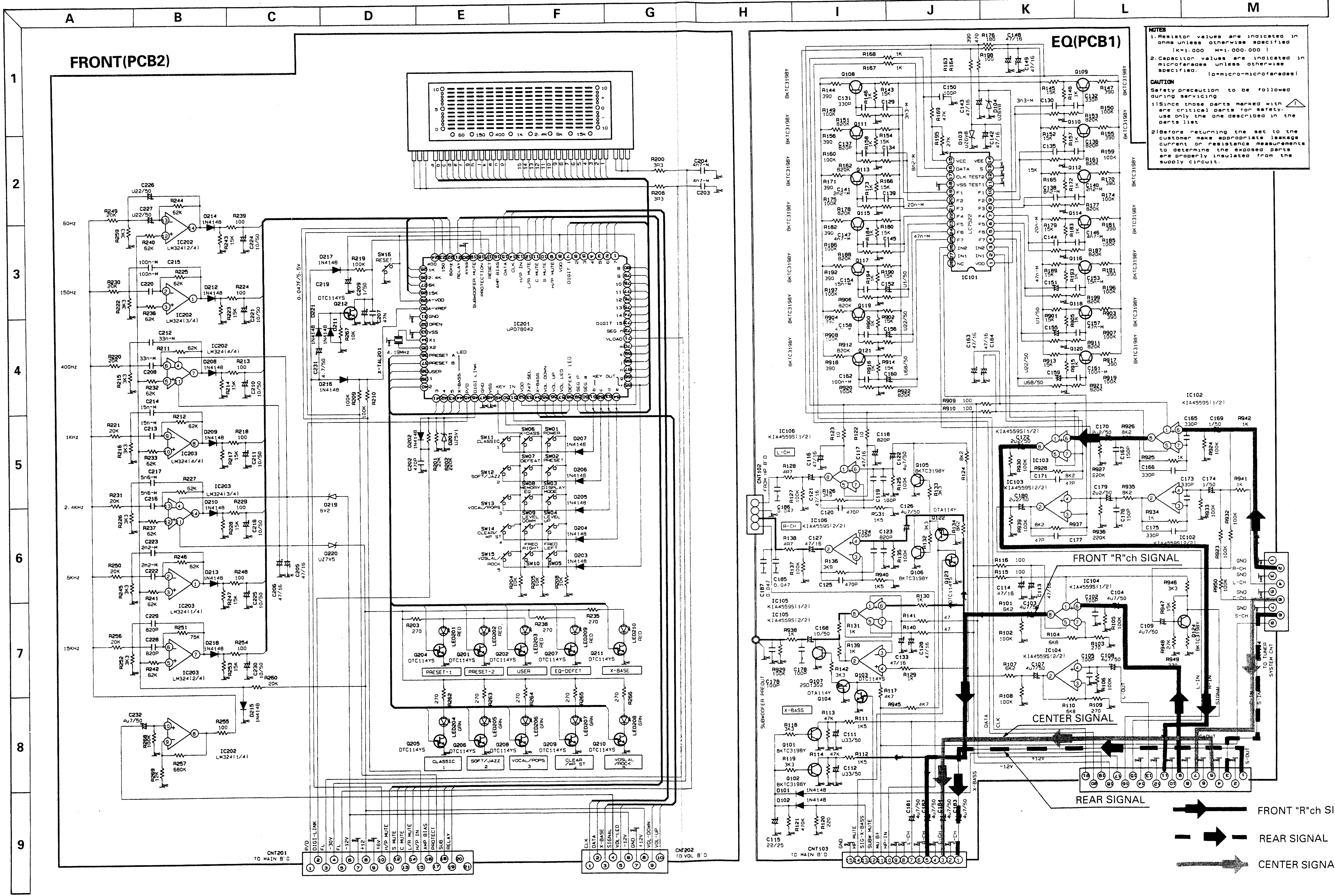


IC303 :KA7805



SCHEMATIC DIAGRAM I

Model No. : AX-747/AV-757



A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
6
7
8
9
FRONT(PCB2)
EQ(PCB1)
60Hz
150Hz
400Hz
1KHz
2.4KHz
6KHz
15KHz
IC201
uPD78042
IC101
LC7522
X-TAL201
4.19MHz
SW11 CLASSIC
SW12 SOFT/JAZZ
SW13 VOCAL/POPS
SW14 CLEAR/WP ST
SW15 VOSLAL/ROCK
SW16 RESET
PRESET-1
PRESET-2
USER
EQ-DEFET
X-BASE
CLASSIC 1
SOFT/JAZZ 2
VOCAL/POPS 3
CLEAR /WP ST 4
VOSLAL /ROCK 5
CNT201 TO MAIN B'D
CNT202 TO VOL B'D
CNT103 TO MAIN B'D
CNT102 FROM HP B'D
TO TUNER SYSTEM CNT
FRONT "R"ch SIGNAL
CENTER SIGNAL
REAR SIGNAL

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
(K=1.000 M=1.000.000)

2. Capacitor values are indicated in microfarades unless otherwise specified.
(p=micro-microfarades)

CAUTION

Safety precaution to be followed during servicing

1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list

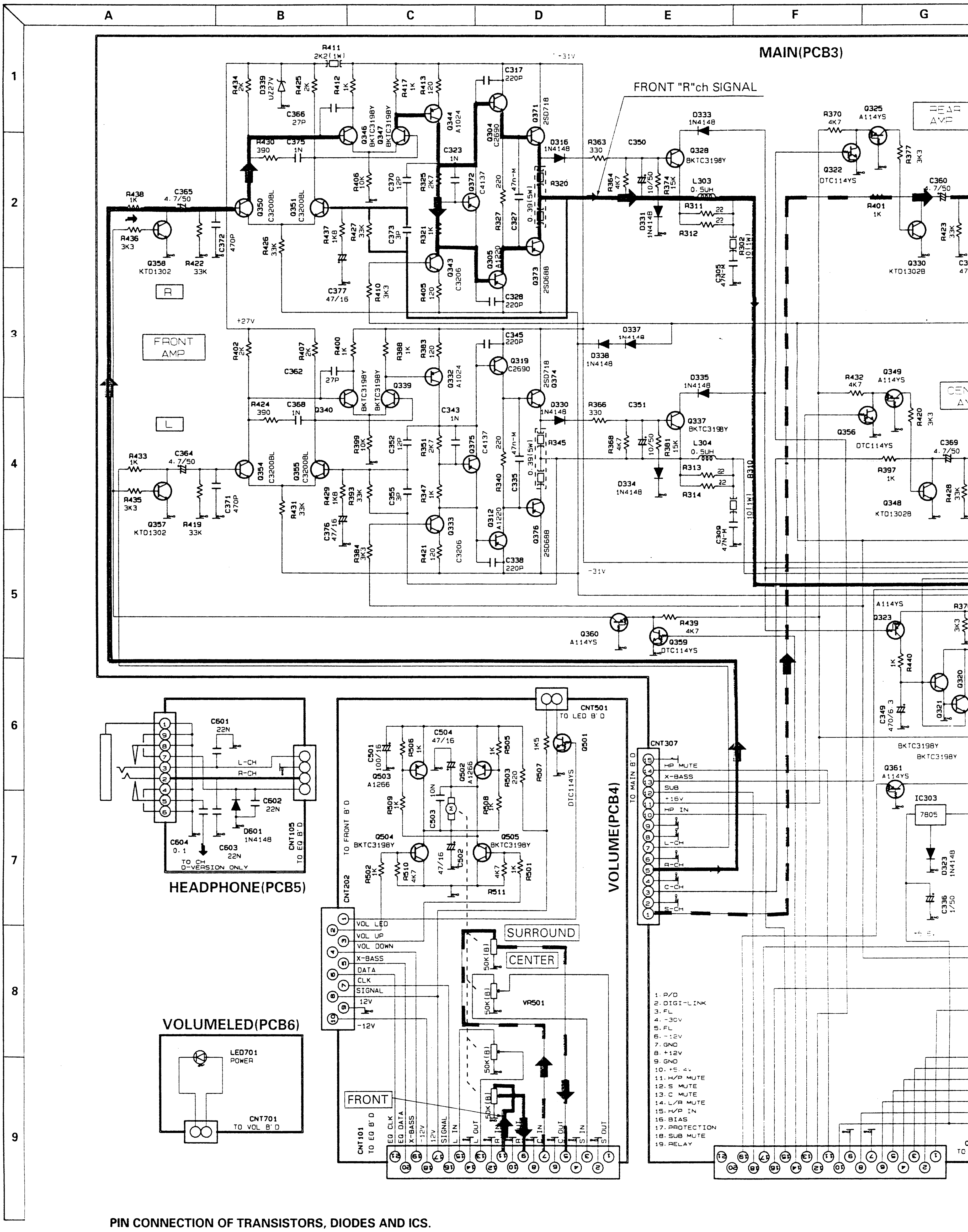
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

FRONT "R"ch SIGNAL

REAR SIGNAL

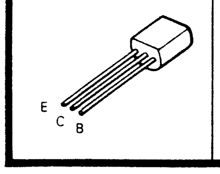
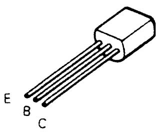
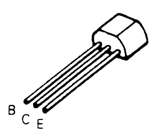
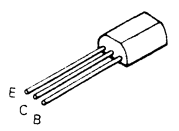
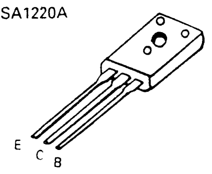
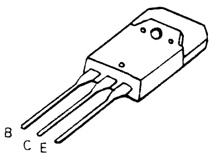
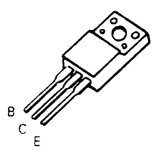
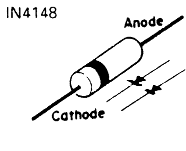
CENTER SIGNAL

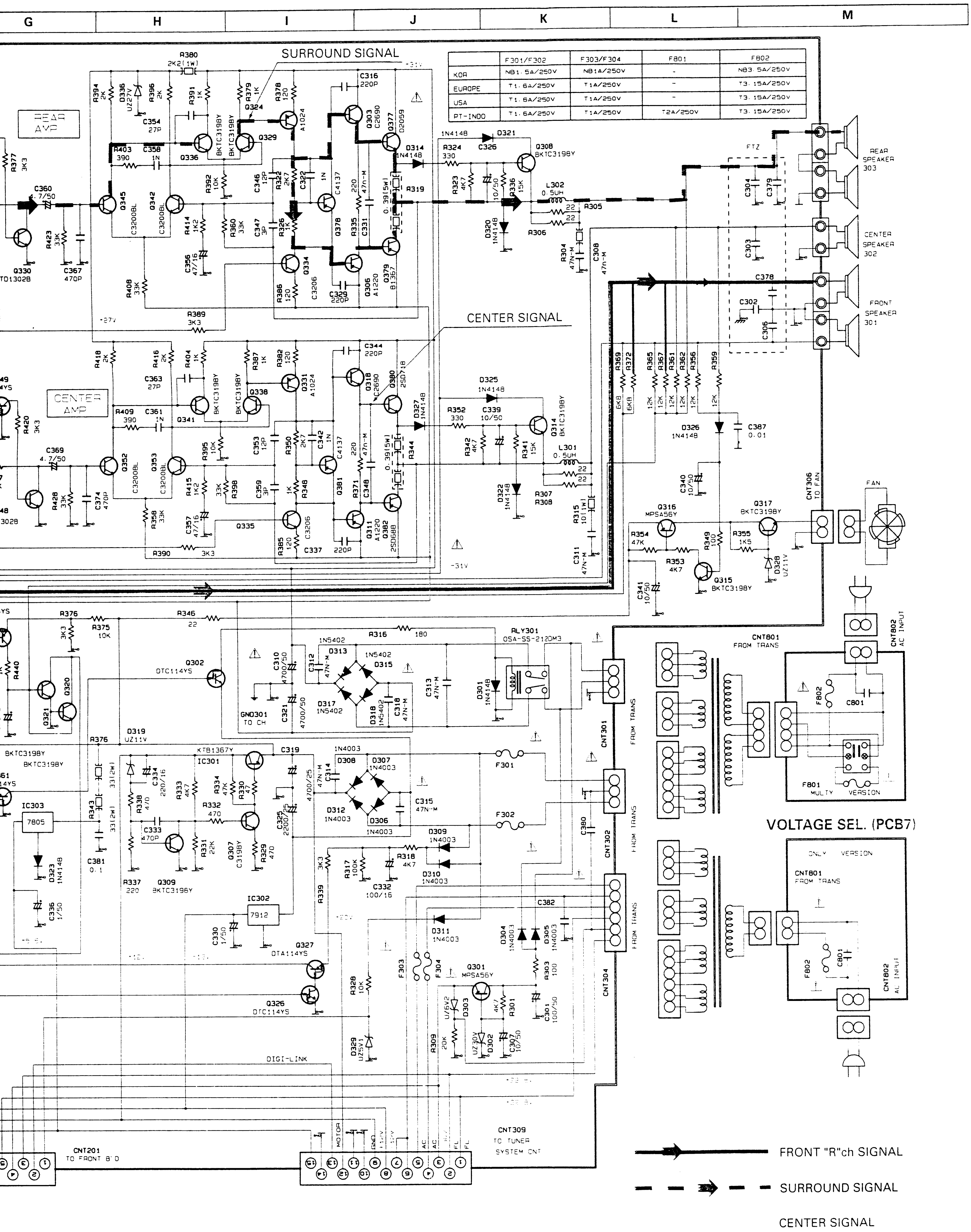
SCHEMATIC DIAGRAM II



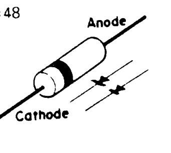
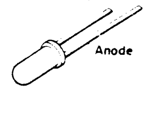
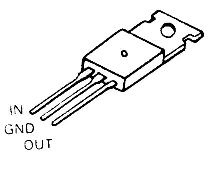
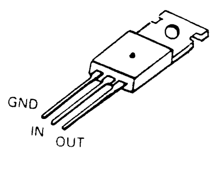
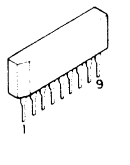
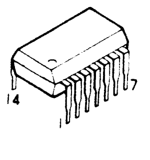
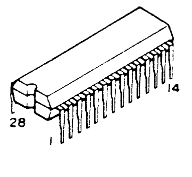
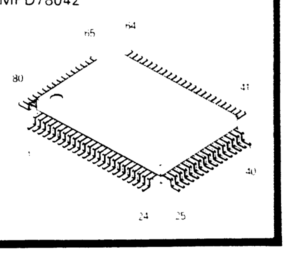
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
MAIN(PCB3)
FRONT "R"ch SIGNAL
FRONT AMP
R
L
+27V
-31V
REAR AMP
HEADPHONE(PCB5)
TO CH D-VERSION ONLY
CNT105 TO EQ B'D
VOLUMELED(PCB6)
LED701 POWER
CNT701 TO VOL B'D
VOLUME(PCB4)
CNT501 TO LED B'D
CNT202 TO FRONT B'D
CNT101 TO EQ B'D
CNT307 TO MAIN B'D
SURROUND
CENTER
FRONT
VR501
VOL LED
VOL UP
VOL DOWN
X-BASS
DATA
CLK
SIGNAL
12V
-12V
HP MUTE
SUB
HP IN
L-CH
R-CH
C-CH
S-CH
IC303
7805
1. P/D
2. DIGI-LINK
3. FL
4. -30V
5. FL
6. -12V
7. GND
8. +12V
9. GND
10. +5.4
11. H/P MUTE
12. S MUTE
13. C MUTE
14. L/R MUTE
15. H/P IN
16. BIAS
17. PROTECTION
18. SUB MUTE
19. RELAY

PIN CONNECTION OF TRANSISTORS, DIODES AND ICS.

KTD1302 KTC2240/KTC3200 KTC3198/KTC1815 KTA1266/KTA1015Y  E C B	MPSA56Y  E B C	DTA114YS DTC114YS  B C E	KTA949/KTA1024  E C B	2SC4137 KSC2690A KSA1220A  E C B	KTB688 KTD718  B C E	2SB1367 2SD2059  B C E	ZENER IN5402 IN4003 IN4148  Anode Cathode

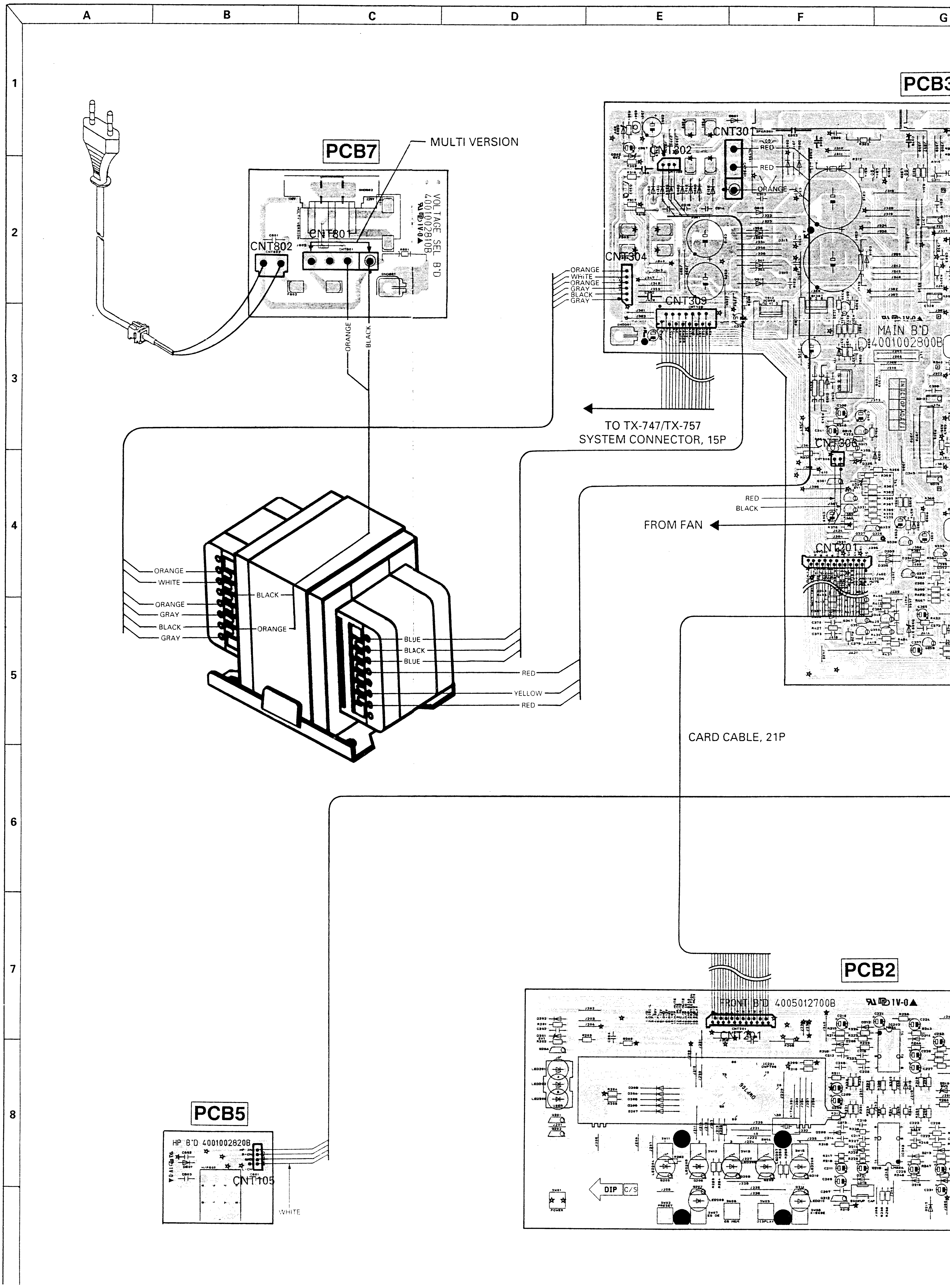

G
H
I
J
K
L
M
SURROUND SIGNAL
CENTER SIGNAL
REAR AMP
CENTER AMP
REAR SPEAKER 303
CENTER SPEAKER 302
FRONT SPEAKER 301
FTZ
FAN
CNT306 TO FAN
CNT301 FROM TRANS
CNT302 FROM TRANS
CNT304 FROM TRANS
CNT801 FROM TRANS
CNT802 AC INPUT
F801 MULTY VERSION
VOLTAGE SEL. (PCB7)
ONLY VERSION
RLY301 OSA-SS-212DM3
GND301 TO CH
IC301
IC302 7912
IC303 7805
DIGI-LINK
CNT201 TO FRONT B'D
CNT309 TO TUNER SYSTEM CNT
FRONT "R"ch SIGNAL
SURROUND SIGNAL
CENTER SIGNAL

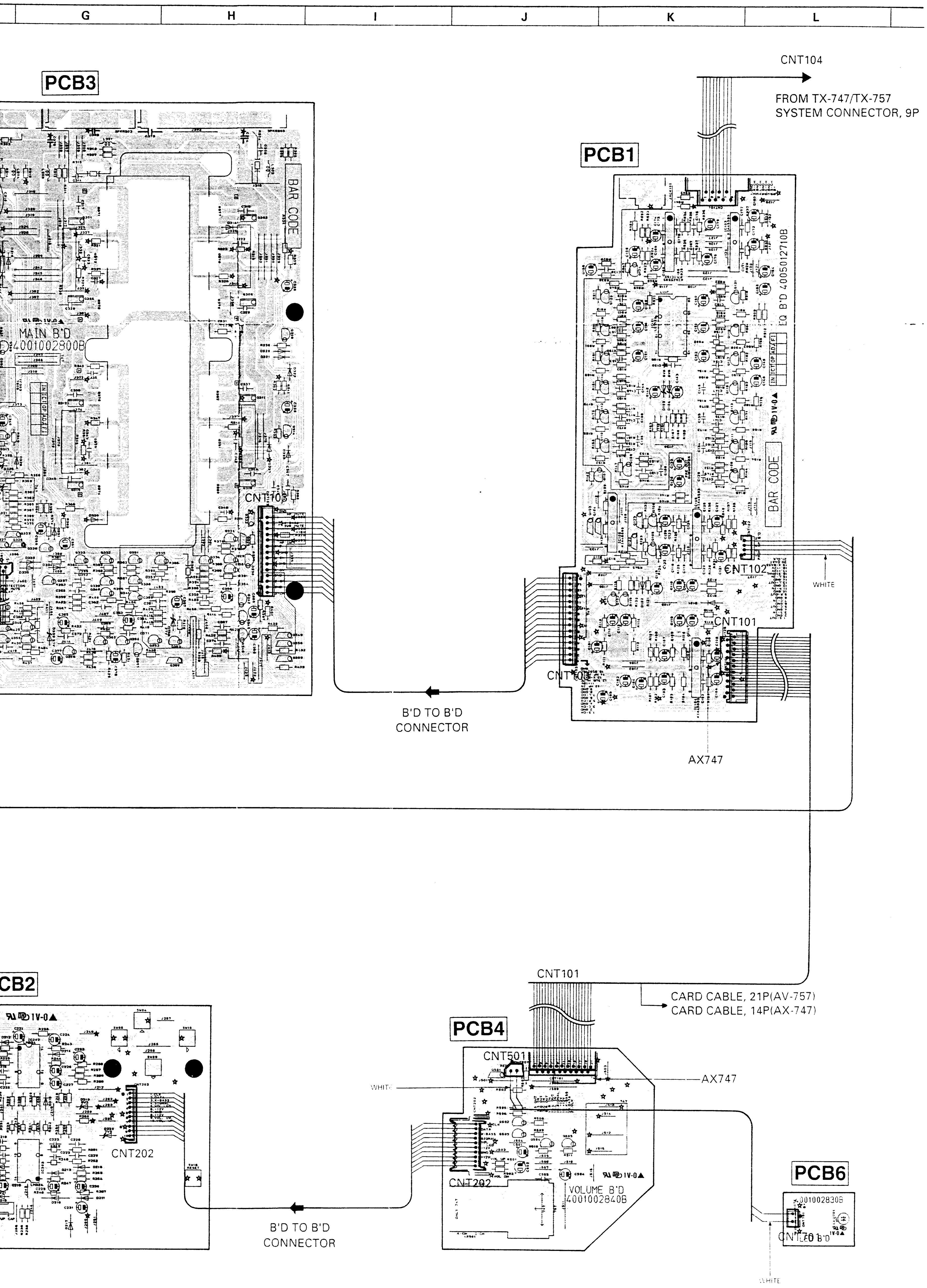
	F301/F302	F303/F304	F801	F802
KOR	NB1.5A/250V	NB1A/250V	-	NB3.5A/250V
EUROPE	T1.6A/250V	T1A/250V	-	T3.15A/250V
USA	T1.6A/250V	T1A/250V	-	T3.15A/250V
PT-INDO	T1.6A/250V	T1A/250V	T2A/250V	T3.15A/250V

ER 02 03 48	SLR-34GCF25 SLR-34URCF25 SLM-34K-3	KIA7805	KIA7912	KIA4559S/KIA75559S	KA324	LC7522	MPD78042
							

Anode
Cathode
Cathode
Anode
IN
GND
OUT
GND
IN
OUT
9
1
14
7
1
28
1
14
80
65
64
41
40
24
25

WIRING DIAGRAM


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
PCB7
MULTI VERSION
VOLTAGE SEL B'D
4001002810B
CNT802
CNT801
ORANGE
BLACK
PCB3
CNT301
CNT302
RED
ORANGE
CNT304
ORANGE
WHITE
ORANGE
GRAY
BLACK
GRAY
CNT309
MAIN B'D
4001002800B
TO TX-747/TX-757
SYSTEM CONNECTOR, 15P
CNT306
RED
BLACK
FROM FAN
CNT201
ORANGE
WHITE
ORANGE
GRAY
BLACK
GRAY
BLACK
ORANGE
BLUE
BLACK
BLUE
RED
YELLOW
RED
CARD CABLE, 21P
PCB2
FRONT B'D 4005012700B
CNT201
DIP
C/S
PCB5
HP B'D 4001002820B
CNT105
WHITE


G
H
I
J
K
L
PCB3
MAIN B'D
4001002800B
BAR CODE
CNT103
CNT104
FROM TX-747/TX-757
SYSTEM CONNECTOR, 9P
PCB1
LQ B'D 4005012710B
BAR CODE
CNT102
WHITE
CNT101
CNT100
B'D TO B'D
CONNECTOR
AX747
CB2
CNT202
B'D TO B'D
CONNECTOR
CNT101
CARD CABLE, 21P(AV-757)
CARD CABLE, 14P(AX-747)
PCB4
CNT501
WHITE
AX747
CNT202
VOLUME B'D
4001002840B
PCB6
CNT701
LED B'D
WHITE

▪ TX-757/747 ▪

SPECIFICATIONS

* **Preparation :** Output voltage setting at speaker terminal for measrement is 2 V (Input : VIDEO, 1kHZ. 250MV)

FM SECTION

* Measurement Condition

- Antenna input impedance: 75 ohms

Version	USA/Canada ("A")	Europe ("D")	Korea ("KS")	Multi ("PT INDO")
RF Signal	98.1 MHz	98.0 MHz	98.1 MHz	98.0 MHz

No.	Description		Unit	Nominal	Limit
1	Tuning Frequency Range	KS, A	MHz	87.5 - 107.9	
		D, PT INDO		87.5 - 108.0	
2	Scaning Frequency Interval	KS, A	kHz	200	
		D, PT INDO		50	
3	FM De-emphasis	KS, A	uS	75	
		D, PT INDO		50	
4	Usable Sensitivity 90.1/106.1 MHz, Stereo Mode, S/N=30 dB		uV	≤1.5	≤3
5	50 dB Quieting Sensitivity S/N=50 dB (IHF BPF)		uV	≤50	
6	Signal to Noise Ratio, 75 kHz Dev.	MONO	dB	≥73	≥67
		STEREO (BPF)		≥70	≥64
7	Total Harmonic Distortion at 1 kHz, 75 kHz Dev.	MONO	%	≤0.2	≤0.4
		STEREO (BPF)		≤0.4	≤0.8
8	Stereo Threshold		uV	10±2	10±4
9	Muting Threshold		uV	10±2	10±4
10	Output Voltage with 1 kHz, DOLBY Tape (TCC-130) (Referance voltage setting: speaker output 2 V)		mV	4000±400	4000±600
11	Memory Holding Time		week	≥4	
12	Stereo Separation at 1 kHz, 98 MHz (IHF BPF)		dB	≥45	≥40

AM SECTION

* Measurement Condition

- RF Signal: 999 kHz, 5 mV/m or 207 kHz, 5 mV/m
- MOD.: 400 Hz, 30%

No.	Description		Unit	Nominal	Limit
1	Tuning Frequency Range	KS	kHz	522～1611	
		A		520～1710	
		PT INDO		520/522～1710/1611	
		D		522～1611, 153～279	
2	Scaning Frequency Interval	KS, D	kHz	9	
		A		10	
		PT INDO		9/10	
3	Usable Sensitivity, S/N=20 dB, 30% Mod.	600/1400 kHz	uV/m	≤600	≤1000
		162/252 kHz		≤1000	≤1300
4	Signal to Noise Ratio, 30% Mod.	999 kHz, 400 Hz	dB	≥40	≥36
		207 kHz, 400 Hz		≥35	≥30
5	Output Voltage, 400 Hz, 30% Mod., 5mV/m (Referance voltage setting: speaker output 2 V)	DOLBY Tape TCC-130	mV	1500±400	1500±600
6	Search Level		uV/m	600±100	600±200

VIDEO SECTION (TX-757 ONLY)

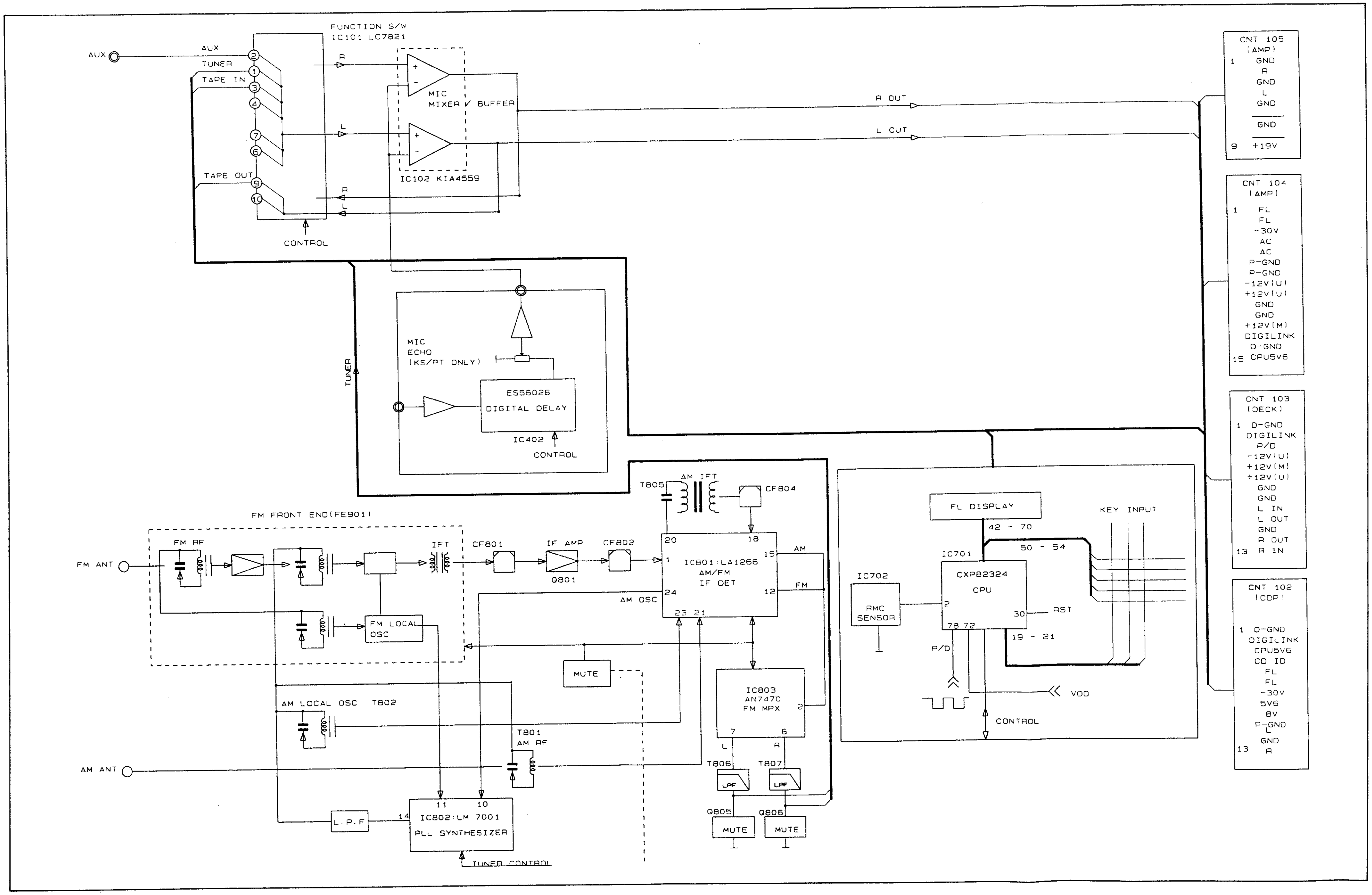
No.	Description	Unit	Nominal	Limit
1	Input Sensitivity/Impedance (75 Ω)	dB	1Vp-p ± 0.5	1Vp-p ± 1
2	Output Voltage/Impedance (75 Ω)	dB	1Vp-p ± 0.5	1Vp-p ± 1
3	Frequency Response at ∓3 dB	Hz	10~6M	20~5M
4	Crosstalk at 1.0 MHz	dB	≥50	≥45
5	Signal to Noise Ratio at 1 MHz, Input shorted	dB	≥50	≥45

INPUT SECTION

No.	Description	Unit	Nominal	Limit
1	Input Sensitivity			
	TV/AUX etc. (Impedance : 47 kohms) **TX-757**	mV	250±20	250±40
	AUX (Inpedance : 49 kohms) **TX-747**			
	MIC (Impedance: 600 ohms)		2.5±0.2	2.5±0.5
2	Output Voltage at TAPE REC	mV	250±20	250±40

BLOCK DIAGRAM I

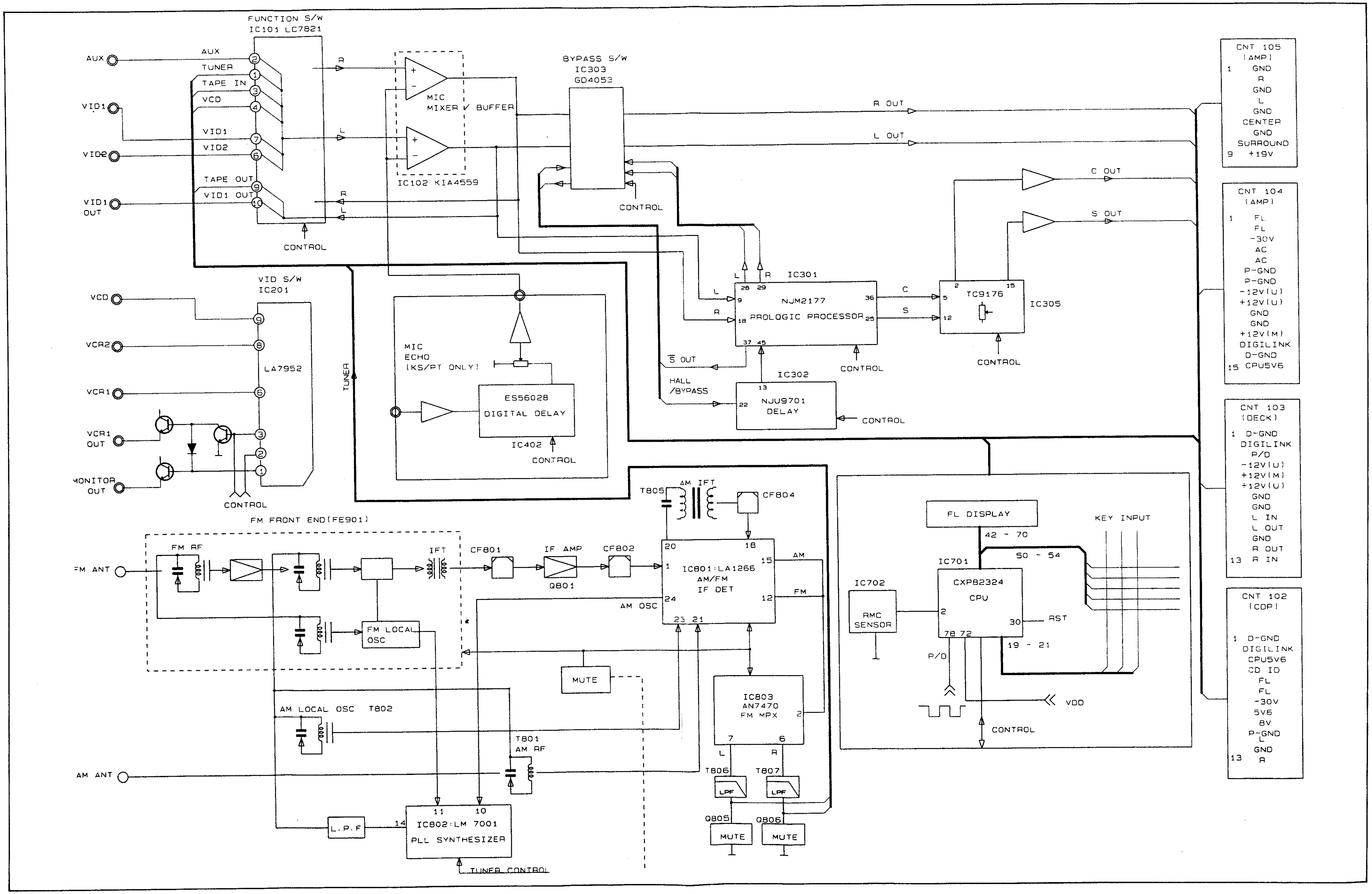
Model No : TX-747



FUNCTION S/W
IC101 LC7821
AUX
AUX
TUNER
TAPE IN
TAPE OUT
R
L
R
L
CONTROL
MIC
MIXER / BUFFER
IC102 KIA4559
R OUT
L OUT
TUNER
MIC
ECHO
(KS/PT ONLY)
ES56028
DIGITAL DELAY
IC402
CONTROL
CNT 105
(AMP)
1 GND
R
GND
L
GND
GND
9 +19V
CNT 104
(AMP)
1 FL
FL
-30V
AC
AC
P-GND
P-GND
-12V(U)
+12V(U)
GND
GND
+12V(M)
DIGILINK
D-GND
15 CPU5V6
CNT 103
(DECK)
1 D-GND
DIGILINK
P/D
-12V(U)
+12V(M)
+12V(U)
GND
GND
L IN
L OUT
GND
R OUT
13 R IN
CNT 102
(CDP)
1 D-GND
DIGILINK
CPU5V6
CD ID
FL
FL
-30V
5V6
8V
P-GND
GND
13 R
FM FRONT END(FE901)
FM RF
IFT
FM ANT
FM LOCAL OSC
CF801
IF AMP
Q801
CF802
T805
AM IFT
CF804
IC801:LA1266
AM/FM
IF DET
20
18
1
15
24
12
23 21
AM
FM
AM OSC
MUTE
AM LOCAL OSC T802
T801
AM RF
AM ANT
IC803
AN7470
FM MPX
2
7
6
L
R
T806
T807
LPF
LPF
Q805
Q806
MUTE
MUTE
L.P.F
14
11
10
IC802:LM 7001
PLL SYNTHESIZER
TUNER CONTROL
FL DISPLAY
42 ~ 70
50 ~ 54
KEY INPUT
IC701
CXP82324
CPU
IC702
RMC
SENSOR
2
30
RST
78 72
19 ~ 21
P/D
VDD
CONTROL

BLOCK DIAGRAM II

Model No : TX-757


FUNCTION S/W
IC101 LC7821
AUX
TUNER
TAPE IN
VCD
VID1
VID1
VID2
VID2
TAPE OUT
VID1 OUT
VID1
OUT
CONTROL
R
L
R
L
MIC
MIXER / BUFFER
IC102 KIA4559
BYPASS S/W
IC303
GD4053
CONTROL
R OUT
L OUT
C OUT
S OUT
CNT 105
(AMP)
1 GND
R
GND
L
GND
CENTER
GND
SURROUND
9 +19V
CNT 104
(AMP)
1 FL
FL
-30V
AC
AC
P-GND
P-GND
-12V(U)
+12V(U)
GND
GND
+12V(M)
DIGILINK
D-GND
15 CPU5V6
CNT 103
(DECK)
1 D-GND
DIGILINK
P/D
-12V(U)
+12V(M)
+12V(U)
GND
GND
L IN
L OUT
GND
R OUT
13 R IN
CNT 102
(CDP)
1 D-GND
DIGILINK
CPU5V6
CD IO
FL
FL
-30V
5V6
8V
P-GND
L
GND
13 R
VID S/W
IC201
VCD
VCR2
VCR1
VCR1
OUT
MONITOR
OUT
LA7952
CONTROL
TUNER
MIC
ECHO
(KS/PT ONLY)
ES56028
DIGITAL DELAY
IC402
CONTROL
L
R
IC301
NJM2177
PROLOGIC PROCESSOR
28 29 9 18 37 45 36 25
C
S
$\overline{S}$ OUT
CONTROL
HALL
/BYPASS
IC302
13 22
NJU9701
DELAY
CONTROL
2 15 5 12
TC9176
IC305
CONTROL
FM FRONT END(FE901)
FM ANT
FM RF
IFT
FM LOCAL
OSC
CF801
IF AMP
Q801
CF802
T805
AM IFT
CF804
20 18 1 15 24 12 23 21
IC801:LA1266
AM/FM
IF DET
AM
FM
AM OSC
MUTE
IC803
AN7470
FM MPX
2 7 6
L
R
T806
T807
LPF
LPF
Q805
Q806
MUTE
MUTE
AM LOCAL OSC
T802
T801
AM RF
AM ANT
L.P.F
14 11 10
IC802:LM 7001
PLL SYNTHESIZER
TUNER CONTROL
FL DISPLAY
42 - 70
KEY INPUT
50 - 54
IC701
CXP82324
CPU
IC702
RMC
SENSOR
2
30
RST
78 72
19 - 21
P/D
VDD
CONTROL

DISASSEMBLY PROCEDURES

REFER TO PAGES 39 AND 52.

[1] COVER TOP REMOVAL.

Remove 5 screws (S2) (05 to 09) and then remove the Cover Top ㉚.

[2] FRONT PANEL ASSEMBLY REMOVAL

1. Remove the Cover Top ㉚, referring to then previous step [1].
2. Remove the Card Cable from wafer (CNT701) on the Main P.C.Board (PCB1)
3. Disconnect (CNT401) from the Main P.C.Board (PCB5).
4. Remove 7 screws (S2) (01 to 04), (S1) (01 to 03) and then remove the Front Panel Assembly (AA).

[3] MIC P.C.BOARD (PCB3) REMOVAL

1. Remove the Cover Top ㉚, referring to the previous step [1].
2. Remove the Front Panel Assembly (AA), referring to the previous step [2].
3. Remove 2 screw (S3) (01, 02) and then remove the Mic PC.Board (PCB3)

[4] FRONT P.C.BOARD (PCB2) REMOVAL

1. Remove the Cover Top ㉚, referring to the prvious step[1].
2. Remove the Front Panel Assembly (AA), reffering to the previous step [2].
3. Remove 9 screws (S2) (23 to 31) and then remove the Front P.CB.oard (PCB2).

[5] RMC P.C.BOARD (PCB5) REMOVAL

1. Remove the Cover Top ㉚, referring to the prvious step[1].
2. Remove the Front Panel Assembly (AA), reffering to the previous step [2].
3. Remove screw (S2) (22) and then remove (PCB5) by pressing the hooks arround it outward.

[6] MAIN P.C.BOARD (PCB1) REMOVAL

1. Remove the Cover Top ㉚, referring to the previous step [1].
2. Remove the Card Cable from wafer(CNT701) on the Main P.C.Board(PCB1).
3. Disconnect (CNT401, CNT102, CNT105) from the Main P.C.Board(PCB1).
4. Disconnect (CP501) from the Voltage P.C.Board (PCB4).
5. Remove 2 screw (S4) (03), (S5) (01) on the Main P.C.Board(PCB1).
6. Remove 9 screws (S2) (14 to 20, 11, 21) from the Chassis Back ㉕ (TX-757).
   Remove 6 screw (S2) (14, 15, 19, 20, 21,11) from the Chassis Back ㉕ (TX-747).

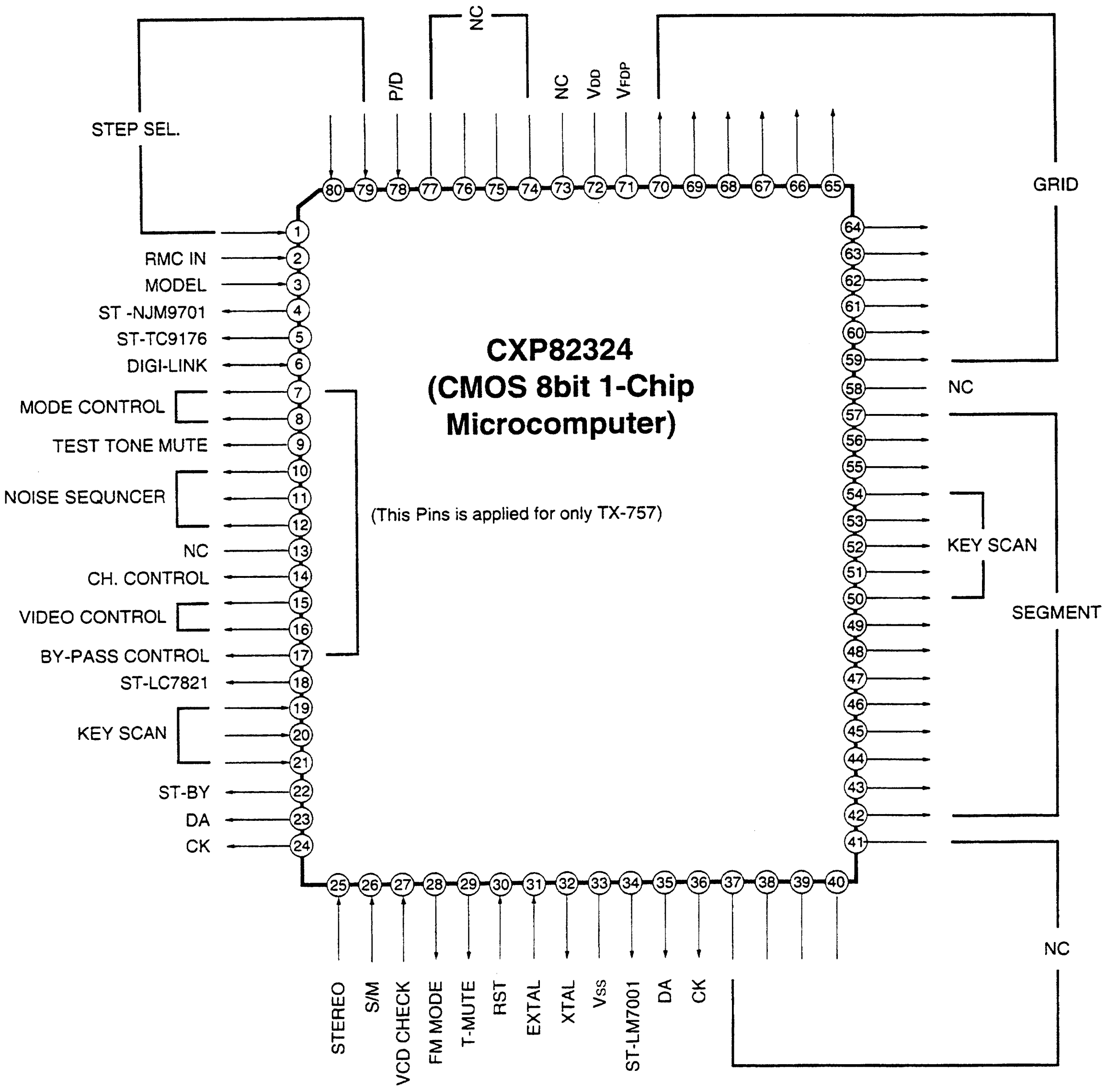
[7] VOLTAGE P.C.BOARD(PCB4) REMOVAL

1. Remove the Cover Top ㉚, referring to the previous step [1].
2. Disconnect (CP501) from the Voltage P.C.Board(PCB4).
3. Remove 2 screws (S4) (01, 02).
4. Remove the Fastener ⑬ and then remove the Voltage P.C.Board(PCB4).

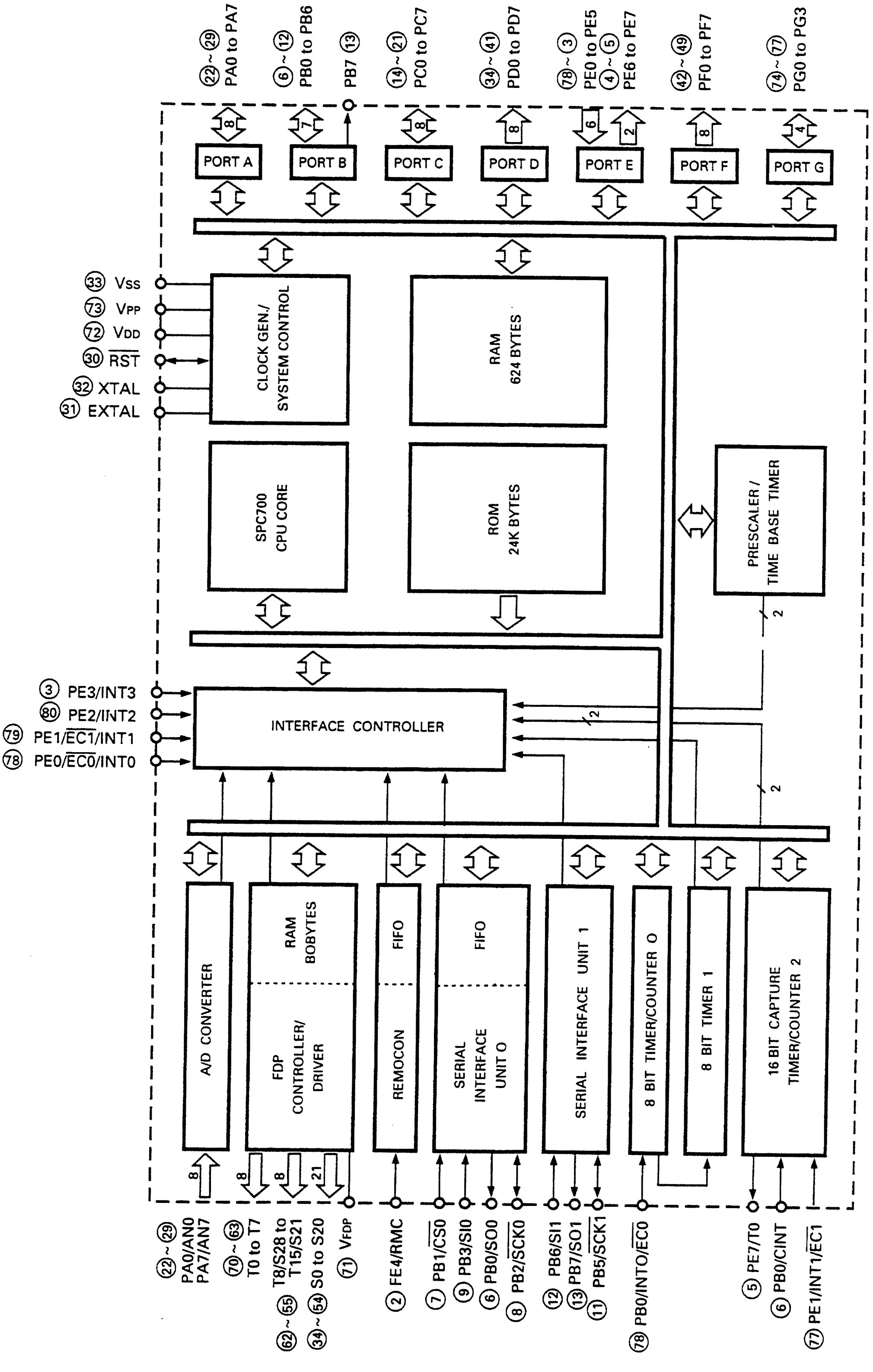
CIRCUIT DESCRIPTION

IC701 : CXP82324 (CMOS 8bit 1-Chip Microcomputer)

1. Pin Connection Diagram


STEP SEL.
P/D
NC
NC
VDD
VFDP
GRID
RMC IN
MODEL
ST -NJM9701
ST-TC9176
DIGI-LINK
MODE CONTROL
TEST TONE MUTE
NOISE SEQUNCER
NC
CH. CONTROL
VIDEO CONTROL
BY-PASS CONTROL
ST-LC7821
KEY SCAN
ST-BY
DA
CK
CXP82324
(CMOS 8bit 1-Chip
Microcomputer)
(This Pins is applied for only TX-757)
NC
KEY SCAN
SEGMENT
NC
STEREO
S/M
VCD CHECK
FM MODE
T-MUTE
RST
EXTAL
XTAL
Vss
ST-LM7001
DA
CK
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80

2. Block Diagram



㉒~㉙ PA0 to PA7
⑥~⑫ PB0 to PB6
PB7 ⑬
⑭~㉑ PC0 to PC7
㉞~㊶ PD0 to PD7
(78)~③ PE0 to PE5
④~⑤ PE6 to PE7
㊷~㊾ PF0 to PF7
(74)~(77) PG0 to PG3
8
7
8
8
6
2
8
4
PORT A
PORT B
PORT C
PORT D
PORT E
PORT F
PORT G
㉝ Vss
(73) VPP
(72) VDD
㉚ RST
㉜ XTAL
㉛ EXTAL
CLOCK GEN./ SYSTEM CONTROL
RAM 624 BYTES
SPC700 CPU CORE
ROM 24K BYTES
PRESCALER / TIME BASE TIMER
2
③ PE3/INT3
(80) PE2/INT2
(79) PE1/EC1/INT1
(78) PE0/EC0/INT0
INTERFACE CONTROLLER
2
2
A/D CONVERTER
FDP CONTROLLER/ DRIVER
RAM 80BYTES
REMOCON
FIFO
SERIAL INTERFACE UNIT 0
FIFO
SERIAL INTERFACE UNIT 1
8 BIT TIMER/COUNTER 0
8 BIT TIMER 1
16 BIT CAPTURE TIMER/COUNTER 2
8
8
8
21
㉒~㉙ PA0/AN0 PA7/AN7
(70)~(63) T0 to T7
(62)~(55) T8/S28 to T15/S21
(54)~㉞ S0 to S20
(71) VFDP
② FE4/RMC
⑦ PB1/CS0
⑨ PB3/SI0
⑥ PB0/SO0
⑧ PB2/SCK0
⑫ PB6/SI1
⑬ PB7/SO1
⑪ PB5/SCK1
(78) PB0/INT0/EC0
⑤ PE7/T0
⑥ PB0/CINT
(77) PE1/INT1/EC1

3. Input and Output Terminal Functions

<table>
<tr><th>Pin No.</th><th>Symbol</th><th>Description</th></tr>
<tr><td>79, 80, 1</td><td>STEP SEL</td><td>Input to select frequency band and step according to regions.
<table>
<tr><th>Region</th><th>Frequency</th><th>Step</th><th>79</th><th>80</th><th>1</th></tr>
<tr><td>Korea</td><td>FM: 87.5~107.9 MHz
AM: 522~1611 kHz</td><td>200 kHz
9 kHz</td><td>L</td><td>H</td><td>H</td></tr>
<tr><td>PT INDO</td><td>FM: 87.5~108 MHz
AM: 522~1611 kHz
520~1710 kHz</td><td>50 kHz
9 kHz
10 kHz</td><td>L</td><td>L</td><td>H</td></tr>
<tr><td>Europe</td><td>FM: 87.5~108 MHz
AM: 522~1611 kHz
153~279 kHz</td><td>50 kHz
9 kHz
9 kHz</td><td>L</td><td>L</td><td>L</td></tr>
<tr><td>USA/Canada</td><td>FM: 87.5~107.9 MHz
AM: 520~1710 kHz</td><td>200 kHz
10 kHz</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>2</td><td>RMC IN</td><td>Input for remote control signal.(At "L", it is active)</td></tr>
<tr><td>3</td><td>MODEL</td><td>Input to segment, and data output for key scan.</td></tr>
<tr><td>4</td><td>ST-NJU9701</td><td>Chip enable output for NJM9701.</td></tr>
<tr><td>5</td><td>ST-TC9176</td><td>Chip enable output for TC9176.</td></tr>
<tr><td>6</td><td>DIGI-LINK</td><td>Output/Input for communication with other sets.</td></tr>
<tr><td>7, 8</td><td>MODE CONTROL</td><td>Output to select prologic mode.
<table>
<tr><th>Pin No.</th><th>Normal</th><th>Wide</th><th>Phantom</th></tr>
<tr><td>7</td><td>H</td><td>L</td><td>L</td></tr>
<tr><td>8</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>9</td><td>TEST TONE MUTE</td><td>Output is "H" when the test tone mode is being activated.</td></tr>
<tr><td>10~12</td><td>NOISE SEQUENCER</td><td>Output to select noise sequence in prologig mode.</td></tr>
<tr><td>13</td><td>NC</td><td>Not Used !</td></tr>
<tr><td>14</td><td>CH. CONTROL</td><td>Output to select the channel mode in NJM2177.</td></tr>
<tr><td>15, 16</td><td>VIDEO CONTROL</td><td>Output to select the video signal in LA7952.
<table>
<tr><th>Pin No.</th><th>VCR1</th><th>VCR2</th><th>VCD</th></tr>
<tr><td>15</td><td>H</td><td>L</td><td>L</td></tr>
<tr><td>16</td><td>L</td><td>H</td><td>H</td></tr>
</table></td></tr>
<tr><td>17</td><td>BY-PASS CONTROL</td><td>Output to allow the audio signal to by-pass dolby decoder IC NJM2177.
At "L" the signal is by-passed.</td></tr>
<tr><td>18</td><td>ST-LC7821</td><td>Chip enable output for LC7821.</td></tr>
<tr><td>19~21</td><td>KEY INPUT</td><td>Data input for key scan.</td></tr>
<tr><td>22</td><td>ST-BY</td><td>When power is on, control data output is "H".
When power is off, control data output is "L".</td></tr>
<tr><td>23/24</td><td>DA/CK</td><td>Data/Clock output for LC7821, NJM9701 and TC9176.</td></tr>
<tr><td>25</td><td>STEREO</td><td>Input to light "STEREO" indicator.(At "L", it is active)</td></tr>
<tr><td>26</td><td>S/M</td><td>Input to detect RF level of station during tuning.</td></tr>
<tr><td>27</td><td>VCD CHECK</td><td>Input to detect CDC ("H") or VCDC ("L").</td></tr>
<tr><td>28</td><td>FM MODE</td><td>Output to select FM MONO or STEREO.
At "H", FM MONO is selected and at "L", FM STEREO is selected.</td></tr>
<tr><td>29</td><td>T-MUTE</td><td>Output for tuner mute.(At "H", it is active)</td></tr>
<tr><td>30</td><td>RST</td><td>Input to reset CPU.</td></tr>
<tr><td>31</td><td>EXTAL</td><td>Input for crystal oscillator.</td></tr>
</table>

Pin No.	Symbol	Description
32	XTAL	Output for crystal oscillator.
33	Vss	Ground
34	ST-LM7001	Chip enable output for LM7001.
35/36	DA/CK	Data/Clock output for LM7001.
37~41	NC	Not Used !
42~49	SEGMENT	Segment signal output for FIP.
50~54	SEGMENT/ KEY SCAN	Segment signal output for FIP and Data output for key scan.
55~57	SEGMENT	Segment signal output for FIP.
58	NC	Not Used !
59~70	GRID	Grid signal output for FIP.
71	Vfdp	Power supply for FIP controller.
72	Vdd	+5V Power supply.
73	NC	Not Used ! (Connected to Vdd)
74~77	NC	Not Used !
78	P/D	Input to detect power down.(At "H", it is active)

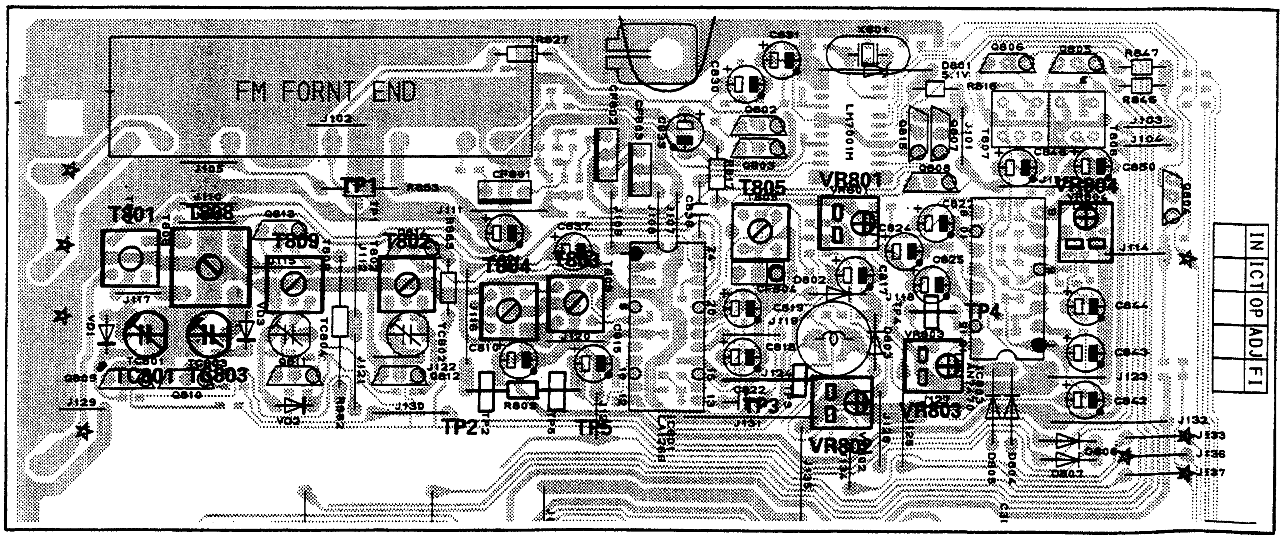
ALIGNMENT PROCEDURES

1. Equipment Required

- AM Standard Signal Generator (AM SSG)
- Oscilloscope
- AC Voltmeter
- FM Standard Signal Generator (FM SSG)
- Stereo Modulator
- Audio Generator
- Distortion Meter
- DC Voltmeter
- Frequency Counter

Note: Disconnect external FM antenna prior to alignment.

2. Alignment and Test Points (PCB1)

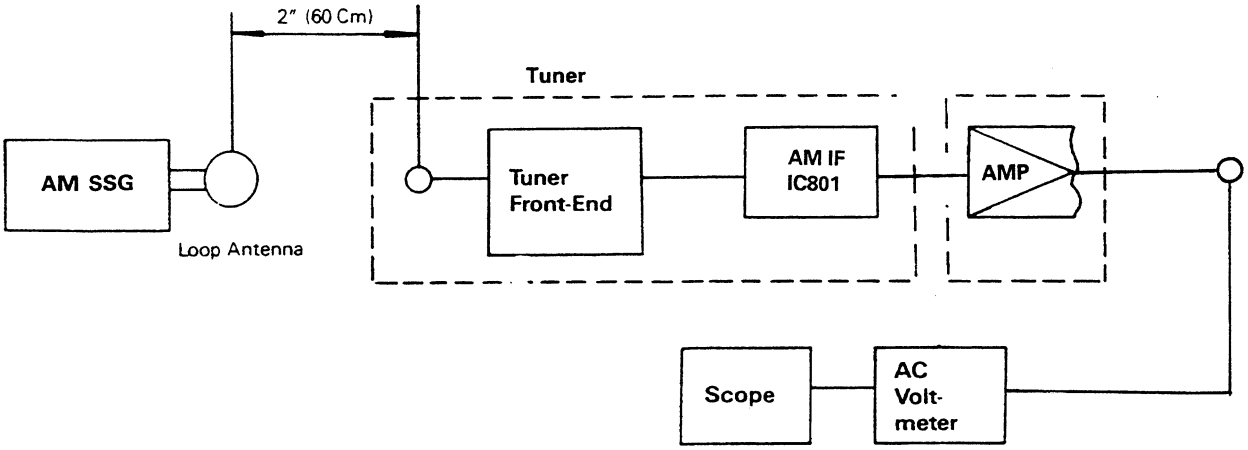

FM FORNT END
TP1
TP2
TP3
TP4
TP5
T801
T808
T809
T802
T804
T803
T805
TC801
TC803
VR801
VR802
VR803
VR804
LM7001M
X801
IN
ICT
OP
ADJ
FI

3. AM IF and RF Alignment

Preparation

1. Output of Signal Generator should not be higher than necessary to obtain an optimum output reading.

Step	Signal Generator Frequency	Receiver Frequency on the Display	Equipment Connection	Adjustment point	Adjust for
1	999 kHz (400 Hz, Mod.)	522 kHz	DC Voltmeter TP1	T802	1.1 V reading
	207 kHz (400 Hz, Mod.)	153 kHz	DC Voltmeter TP1	T809	1.8 V reading
2	594 kHz (400 Hz, Mod.)	594 kHz	AC Voltmeter to speaker terminal	T801 (ANT Coil)	Maximum reading
3	1404 kHz (400 Hz, Mod.)	1404 kHz	AC Voltmeter to speaker terminal	T801 (ANT Trimmer)	Maximum reading
4	450 kHz (400 Hz, Mod.)	999 kHz	AC Voltmeter to speaker terminal	T805 (IFT)	Maximum reading
5	999 kHz (400 Hz, Mod.)	999 kHz	DC Voltmeter TP3	VR801	FL display 'TUNED' Indication on receiver with AM SSG output level of 800μV/m 1.4V reading
6	162 kHz (400 Hz, Mod.)	162 kHz	speaker terminal	T808	Maximum reading
7	252 kHz (400 Hz, Mod.)	252 kHz	speaker terminal	TC803	Maximum reading



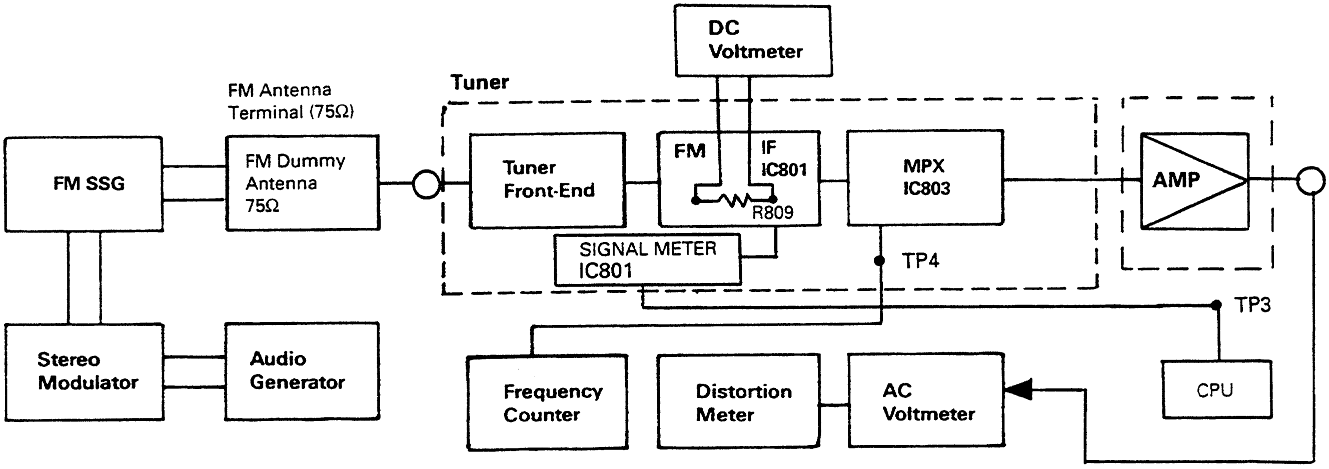
AM Alignment Connection

4. FM IF Alignment

Preparation

1. Signal Generator output should be no higher than necessary to obtain an optimum output reading.
2. Switch Press to FM.
3. Signal generator deviation : 40 kHz (D, PT Version) or 75kHz (A, KS Version)

Step	Signal Generator Frequency	Receiver Frequency on the Display	Equipment Connection	Adjustment point	Adjust for
1	98.0 MHz (1 kHz, Mod.)	98.0 MHz	Distortion meter to speaker terminal	T804	Maximum distortion
2	98.0 MHz (1 kHz, Mod.)	98.0 MHz	DC Voltmeter to TP3	VR802	FL display 'TUNED' Indication on receiver with FM SSG output level of 10μV 1.3V reading
3	98.0 MHz (1 kHz, Mod.)	98.0 MHz	DC Voltmeter to TP2 & TP5	T803	Zero reading on DC voltmeter.



DC Voltmeter
FM Antenna Terminal (75Ω)
Tuner
FM SSG
FM Dummy Antenna 75Ω
Tuner Front-End
FM
IF IC801
R809
MPX IC803
AMP
SIGNAL METER IC801
TP4
TP3
Stereo Modulator
Audio Generator
Frequency Counter
Distortion Meter
AC Voltmeter
CPU

FM RF/IF and MPX Alignment Connection

5. MPX Alignment

Preparation

1. Switch:Press to FM.
2. Tuner for 98 MHz on band.
3. Signal Generator output level:1000μV.
4. Deviation:40 kHz (D, PT Version) or 75kHz (A, KS Version) at 100% modulation of composite signal.
5. Connect Signal Generator to FM antenna terminal through FM dummy antenna (75Ω).

Step	19 kHz Modulation Level	Signal Generator Frequency Setting	Equipment Connection	Adjustment point	Adjust for
1	Pilot off	Carrier only	Frequency counter connect to TP4	VR803	76 kHz ± 50 Hz
2	8% Mod.	Composite to channel 1 kHz R	AC voltmeter to R channel speaker terminal	-	Setting 0dB reference
3	8% Mod.	Composite to channel 1 kHz L	AC voltmeter to R channel speaker terminal	VR804	AC voltmeter reading should be at least 40 dB below.
4	8% Mod.	Composite to channel 1 kHz R	AC voltmeter to R channel speaker terminal	VR804	Same as Step 3.
	If you could not obtain -40 dB readings in Steps 3 and 4 (compared with Step 2), readjust VR804 until you obtain -40 dB readings for both Steps 3 and 4. Nominal is -45dB.				

TROUBLESHOOTING

Symptom	Cause and Remedy
Unit inoperative (FL indicator does not light)	A) Filament resistor R723 or R722 is Blown. Replace the resistor. B) Check the CNT104 (Pin No. 1, 2, 3) and CNT701 (Pin No. 1, 2, 3).
FM inoperative	A) Defective front-end. Replace. B) Defective FM switch. Replace the switch. C) PLL IC(LM7001) Malfunction. Replace the IC(LM7001). D) Defective coil T803 or T804. Replace the coil(s). E) Defective lead-in. Repair or replace the lead-in. F) Ceramic filter CF801, CF802 defective. Replace the defective ceramic filter(s). G) Defective controller circuit component. Replace.
Poor multiplex separation	A) Improper adjustment. Readjust VR803 and VR804. (Refer to MPX Alignment.) B) IC803 defective. Replace. C) Variable resistor VR803 or VR804 defective. Replace the variable resistor(s).
STEREO indicator does not light	A) Defective indicator in FL. Replace. B) Improper adjustment of VR803 of tuner board. Make readjustment. C) Defective IC803 Replace the defective component.
FM volume not sufficient	A) If volume from both L and R channels is not loud enough: Front - end section defective. Faulty C801, Coil T803. Defective C838 of tuner Board. If sound of one channel is not loud enough: Defective T806, T807
FM Mono has no effect	A) Defective FM MODE switch. Replace.

Symptom	**Cause and Remedy**
AM inoperative	A) Damaged IC801 of tuner board. Replace. B) Defective T801, T802, T805 or CF804 of tuner board. Replace the defective component(s). C) Resistor R829, R822 defective. Replace the defective component(s). D) Capacitor C857, C818, C822 defective. Replace the defective capacitor(s). E) Defective AM switch. Replace. F) Defective varicap diode VD1, VD2. Replace Varicap diode(s). G) Damaged AM loop antenna. Repair or replace. H) Defective controller circuit component. Replace.
Auto tune inoperative (UP/DOWN)	A) Poor contact in Up/Down key. Repair or replace. B) Defective IC701. Replace. C) Defective tuner circuit component. Replace. D) In case of FM only, improper adjustment of FM front-end. Readjust.
Manual tune inoperative(UP/DOWN) (AM or FM)	A) Poor contact in Up/Down key. Replace. B) Defective IC701. Replace.
Memory setting inoperative	A) Poor contact in memory set key. Replace. B) Defective IC701. Replace the defective component.
FL inoperative	A) FL defective. Replace. B) Defective IC701. Replace. C) Defective X701. Replace.
Remote Control Unit inoperative	A) Weak Battery. Replace. B) Defective. Replace. C) Defective IC701(CPU). Replace.

MECHANICAL PARTS LIST

Model No. : TX-757

Ref. No.	Description	Part No.	Q'ty	Version
	PACKAGE			
	Box Carton	049605258301	1	KS
	Box Carton	049605258304	1	D,PT INDO,A
	Poly Bag	9705001550	1	
	Cushion Poly	9722041410	1	
	Film Soft PE	9715000120	1	
	ACCESSORIES			
	Assembly Commander	541810127015	1	KS
	Assembly Commander	541810127025	1	D,PT INDO,A
	Battery 1.5V AA(R6M)	5518001610	1	KS
	FM Antenna Wire Dipole	4348000320	1	KS,PT INDO,A
	FM Antenna Cord	4348001110	1	D
	Cord RCA, 1P	4328206410	1	KS,PT INDO
	Manual Instruction	9007018440	1	KS
	Manual Instruction	9007018441	1	PT INDO
	Manual Instruction	9007018451	1	D
	Manual Instruction	9007018443	1	A
	Antenna AM Loop Stand Strip Wire	2608207361	1	KS,PT INDO,A
	Antenna AM Loop Stand Type	2608207360	1	D
	CABINET & CHASSIS			
1	Badge, INKEL	048535045411	1	KS
(1)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO
2	Panel Front	048602020111	1	KS
(2)	Panel Front	048602020131	1	A,D,PT INDO
3	Window Display	048553023512	1	
4	Body Front	048521009511	1	
5	Button Function	048543070012	1	
6	Button Input, 1 key	048545131311	2	
7	Button Mode, 2 key	048545131411	1	
8	Jack Phone	4438005510	1	KS,PT INDO
(8)	Not Used !			A,D
9	Shield Fence	6165146110	1	KS,PT INDO
(9)	Not Used !			A,D
10(VR401)	Volume Mic	3208052410	1	KS,PT INDO
(10)	Not Used !			A,D
11	Foot & Rubber	6035104310	2	
12	Fastener, 12H	6528301710	2	KS,PT INDO
(12)	Fastener, 12H	6528301710	1	A,D
13	Fastener, 19H	6528300210	2	
14	Spacer PCB	6705004220	1	
15	Cushion Foot	6715021230	2	
16	Chassis Main	6121614930	1	
17	Heatsink Regulator TR.	7505206210	1	
18	Jack RCA, 2P	4438103020	1	
19	Jack RCA, 9P	4438114510	1	
20	Jack RCA, 2P	4438103010	1	
21	Terminal Antenna, 4P	4408107120	1	A,KS,PT INDO
(21)	Terminal Antenna, 4P	4408108220	1	D
22	Shield Plate	6165151910	1	A,KS,PT INDO
(22)	Not Used !			D
23	Stopper Connector	6518002210	1	
24	Stopper Connector	6518002110	1	
25	Chassis Back	046102045411	1	KS
(25)	Chassis Back	046102045491	1	PT INDO
(25)	Chassis Back	046102045421	1	A
(25)	Chassis Back	046102045451	1	D
26	Cover Top	046123018011	1	
27	Shield Fence, Front-end	6163115510	1	A,KS,PT INDO
(27)	Not Used !			D
28	Switch Tact	4658003710	14	
29	Switch Tact	4658004010	1	
30	Sponge Rubber	6715012010	1	
31	Knob Rotary	048545131511	1	KS,PT INDO
(31)	Not Used !			A,D
	HARDWARE KIT			
S1	Screw, #2FTC 3x8B	8129230083	5	
S2	Screw, #BBTT 3x8B	8179130083	32	KS,PT INDO
(S2)	Screw, #BBTT 3x8B	8179130083	31	A,D
S3	Screw, Mecha	8155001210	2	KS,PT INDO
(S3)	Not Used !			A,D
S4	Screw, #BWPTT 3x6Y	8179230061	3	
S5	Screw, #2WPTC 3x14Y	8159230141	1	
	MISCELLANEOUS			
	Card Cable, 13P, 140mm	4118613145	1	
	Card Cable, 20P, 200mm	4118620205	1	
	Connector, System, 13P, 500mm	4358613501	1	
	Connector, System, 9P, 500mm	4358609501	1	
PCB1	P.C.Board Main	4004001500	1	
PCB2	P.C.Board Mic (KS, PT INDO AREA ONLY)	4004001530	1	
PCB3	P.C.Board Power	4005512700	1	
PCB4	P.C.Board Front	4004001510	1	
PCB5	P.C.Board RMC	4004001520	1	

Model No. : TX-747

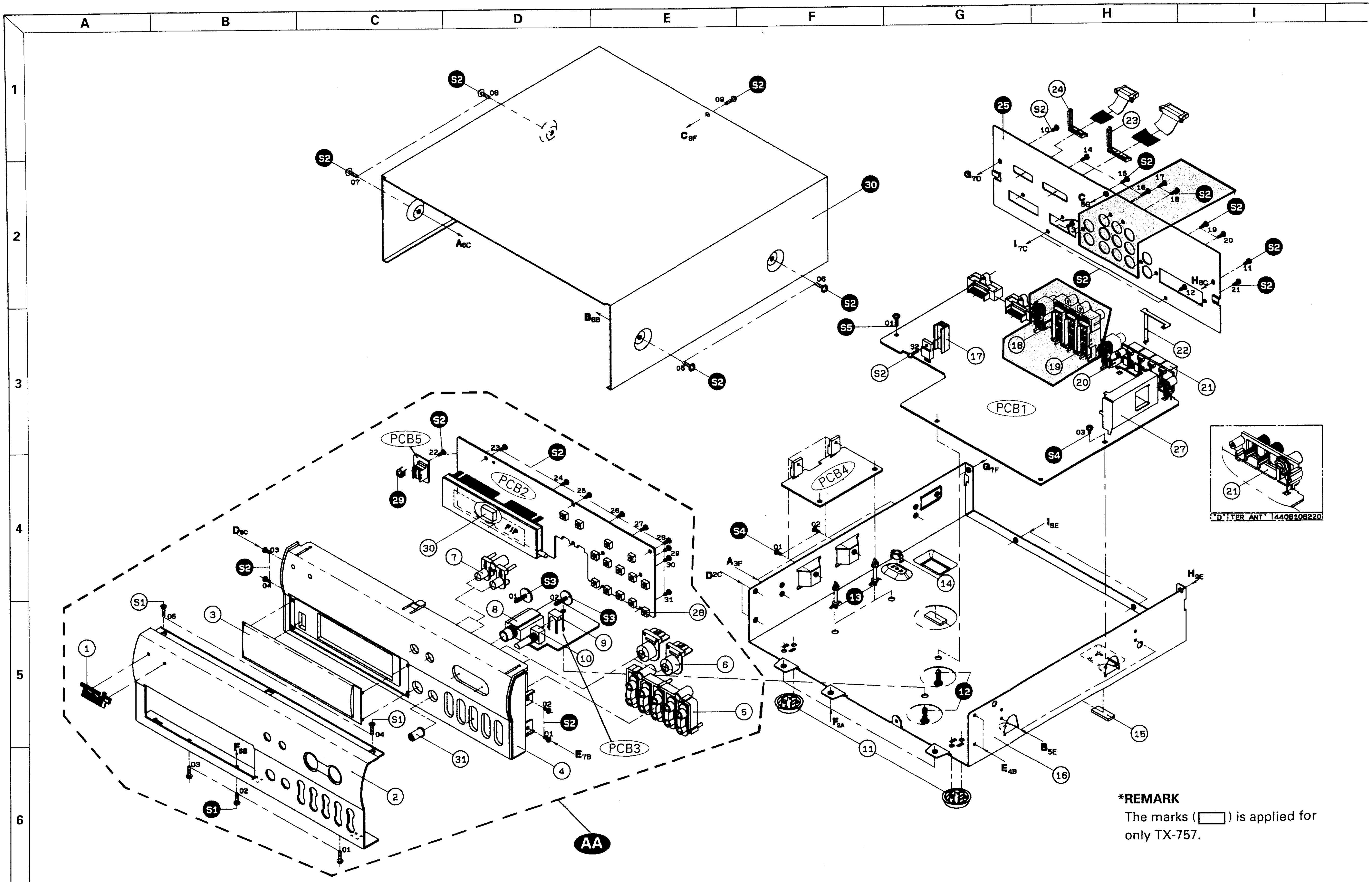
Ref. No.	Description	Part No.	Q'ty	Version
	PACKAGE			
	Box Carton	04960525830	1	KS
	Box Carton	04960525830	1	D,PT INDO
	Poly Bag	9705001550	1	
	Cushion Poly	9722041410	1	
	Film Soft PE	9715000120	1	
	ACCESSORIES			
	Assembly Commander	41810126015	1	KS
	Assembly Commander	41810126025	1	D,PT INDO
	Battery 1.5V AA(R6M)	5518001610	1	KS
	FM Antenna Wire Dipole	4348000320	1	KS,PT INDO
	FM Antenna Cord	4348001110	1	D
	Cord RCA, 1P	4328206410	1	KS,PT INDO
	Manual Instruction	9007018450	1	KS
	Manual Instruction	9007018452	1	PT INDO
	Manual Instruction	9007018451	1	D
	Antenna AM Loop Stand Strip Wire	2608207361	1	KS,PT INDO
	Antenna AM Loop Stand Type	2608207360	1	D
	CABINET & CHASSIS			
1	Badge, INKEL	04853504541	1	KS
(1)	Badge, SHERWOOD	04853504542	1	A,D,PT INDO
2	Panel Front	04860202012	1	A,KS,PT INDO
(2)	Panel Front	04860202014	1	D
3	Window Display	04855302351	1	
4	Body Front	04852100951	1	
5	Button Function	04854307001	1	
6	Button Input, 1 key	04854513131	2	
7	Not Used !			
8	Jack Phone	4438005510	1	
9	Shield Fence	6165146110	1	
10	Volume Mic	3208052410	1	
11	Foot & Rubber	6035104310	2	
12	Fastener, 12H	6528301710	2	
13	Fastener, 19H	6528300210	2	
14	Spacer PCB	6705004220	1	
15	Cushion Foot	6715021230	2	
16	Chassis Main	6121614930	1	
17	Heatsink Regulator TR	7505206210	1	A,KS,PT INDO
(17)	Not Used !			D
18	Not Used !			
19	Not Used !			
20	Jack RCA, 2P	4438103010	1	
21	Terminal Antenna, 4P	4408107120	1	A,KS,PT INDO
(21)	Terminal Antenna, 4P	4408108220	1	D
22	Shield Plate	6165151910	1	A,KS,PT INDO
(22)	Not Used !			D
23	Stopper Connector	6518002210	1	
24	Stopper Connector	6518002110	1	
25	Chassis Back	046102045311	1	KS,PT INDO
(25)	Chassis Back	046102045391	1	A
(25)	Chassis Back	046102045351	1	D
26	Cover Top	046123018011	1	
27	Shield Fence, Front-end	6163115510	1	A,KS,PT INDO
(27)	Not Used !			D
28	Switch Tact	4658003710	11	
29	Switch Tact	4658004010	1	
30	Sponge Rubber	6715012010	1	
31	Knob Rotary	048545131511	1	A,KS,PT INDO
(31)	Not Used !			D
	HARDWARE KIT			
S1	Screw, #2FTC 3x8B	8129230083	5	
S2	Screw, #BBTT 3x8B	8179130083	29	KS,PT INDO
(S2)	Screw, #BBTT 3x8B	8179130083	28	A,D
S3	Screw, Mecha	8155001210	2	A,KS,PT INDO
(S3)	Not Used !			D
S4	Screw, #BWPTT 3x6Y	8179230061	3	
S5	Screw, #2WPTC 3x14Y	8159230141	1	
	MISCELLANEOUS			
	Card Cable, 20P, 200mm	4118620205		
	Connector, System, 13P, 500mm	4358613501		
	Connector, System, 9P, 500mm	4358609501		
PCB1	P.C.Board Main	4004001500		
PCB2	P.C.Board Mic (KS, PT INDO AREA ONLY)	4004001530		
PCB3	P.C.Board Power	4005512700		
PCB4	P.C.Board Front	4004001510		
PCB5	P.C.Board RMC	4004001520		

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list are of special significance to safety. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW

Model No : TX-757/747


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
S2
08
09
a
C8F
07
A8C
30
B8B
06
05
25
24
23
10
14
15
16
17
18
19
20
11
21
12
G7D
C5G
I7C
H8C
S5
01
32
17
18
19
20
21
22
PCB1
03
S4
27
PCB5
22
23
24
25
26
27
28
29
30
31
PCB2
PIP
29
30
7
D3C
S3
8
9
10
02
S1
3
1
04
2
S1
E7B
F6B
PCB3
31
4
5
6
AA
PCB4
G7F
I8E
A3F
D2C
13
14
H9E
12
F2A
11
B5E
E4B
15
16
21
'D' TER ANT' 4408108220

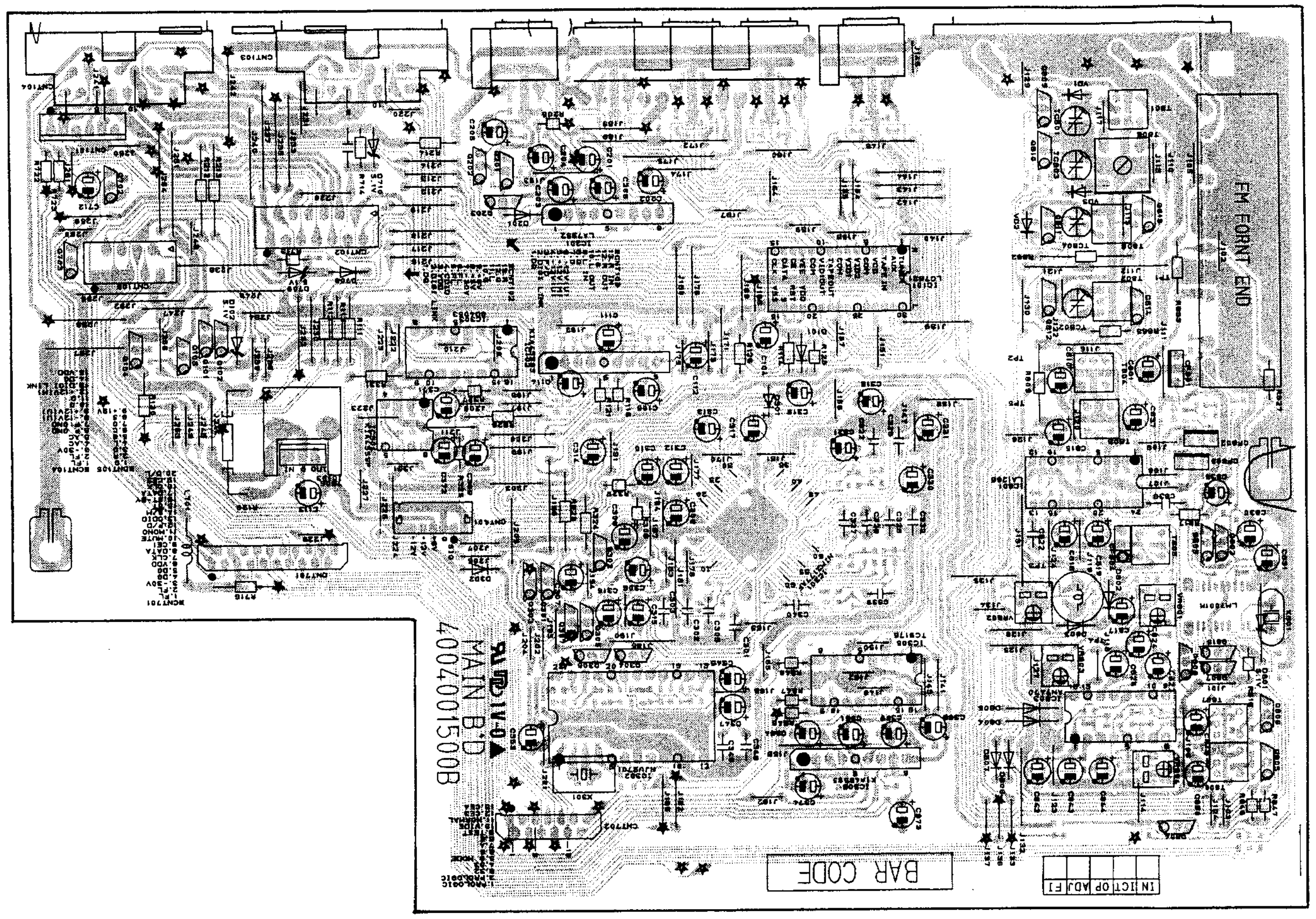
***REMARK**

The marks (☐) is applied for only TX-757.

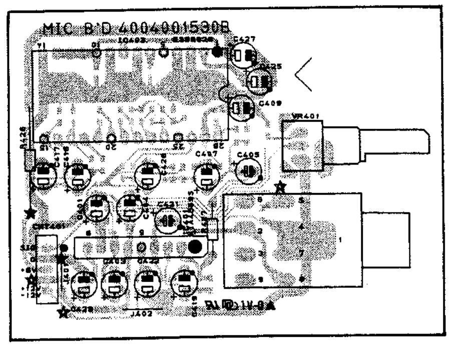
PRINTED CIRCUIT BOARDS

Model No : TX-757/747

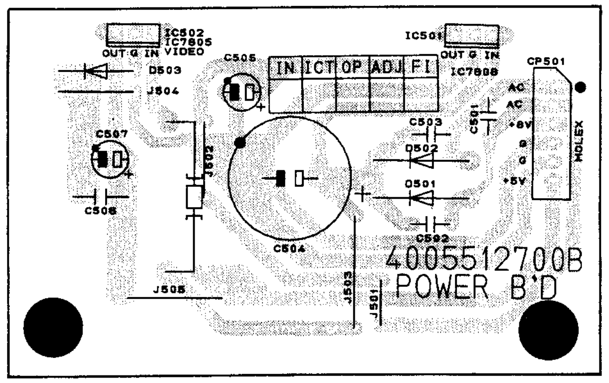
MAIN (PCB1)


FM FORNT END
MAIN B'D
4004001500B
BAR CODE
IN ICT OP ADJ FI

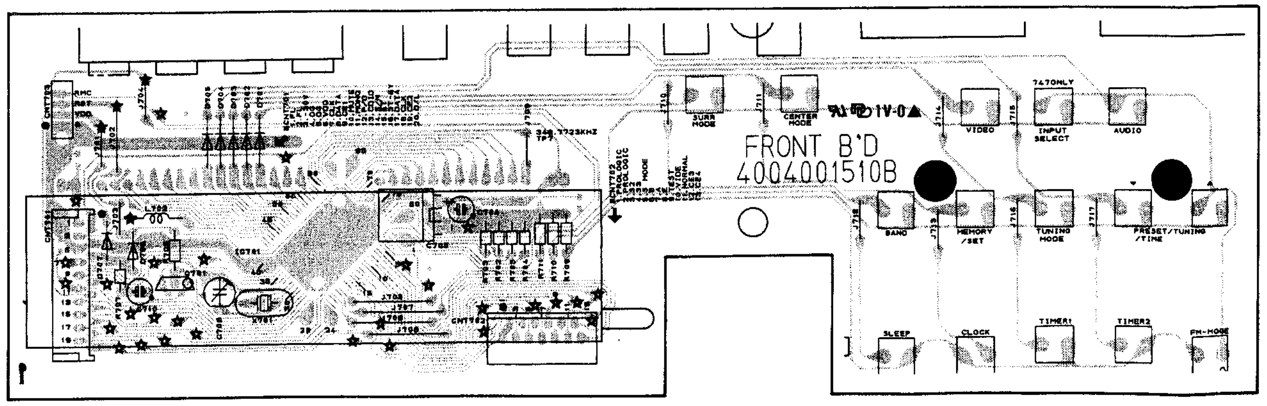
MIC (PCB3)


MIC B'D 4004001530B

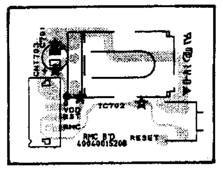
POWER (PCB4)


IC502
IC7805
OUT G IN VIDEO
D503
J504
C505
IN ICT OP ADJ FI
IC501
OUT G IN
IC7808
CP501
AC
AC
+8V
G
G
+5V
MOLEX
C507
C506
J502
C503
D502
D501
C502
C504
4005512700B
POWER B'D
J505
J503
J501

FRONT (PCB2)


FRONT B'D
4004001510B
747ONLY
SURR MODE
CENTER MODE
VIDEO
INPUT SELECT
AUDIO
BAND
MEMORY /SET
TUNING MODE
PRESET/TUNING /TIME
SLEEP
CLOCK
TIMER1
TIMER2
FM-MODE

RMC (PCB5)



ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE : Products marked with ⚠ have special characteristics important to safety.
If you replace any of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicing.
Resistor/Capacitor tolerance – D : (±0.5%), J : (±5%), K : (±10%), M : (±20%), Z : +80, – 20%)

Model No. : TX-757

Ref. No.	Description					Part No.	Q'ty	Version
PCB1	**ASSEMBLY P.C.BOARD MAIN**							
	CAPACITORS							
C100/C101	Chip	0.1	uF	50 V	Z	3539104060	2	
C102	Chip, CH	100	pF	50 V	J	3539101210	1	
C103	Chip	0.047	uF	50 V	Z	3539473060	1	
C104	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C105	Chip	0.047	uF	50 V	Z	3539473060	1	
C107	Chip, CH	220	pF	50 V	J	3539221210	1	KS,PT INDO
(C107)	Not Used !							D,A
C108	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C110	Chip, CH	220	pF	50 V	J	3539221210	1	KS,PT INDO
(C110)	Not Used !							D,A
C111/C112	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C113	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C114	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C115-C128	Chip CH	100	pF	50 V	J	3539101210	14	D
(C115-C128	Not Used !							KS,PT INDO,A
C201-C203	Electrolytic SG	10	uF	35 V	M	3479310061	3	
C204/C205	Electrolytic SG	470	uF	10 V	M	3479347121	2	
C206	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C207	Chip	0.047	uF	50 V	Z	3539473060	1	
C301	Mylar	0.047	uF	100 V	J	3679473120	1	
C302/C303	Mylar	0.1	uF	63 V	K	3679104297	2	
C304	Chip, CH	680	pF	50 V	J	3539681210	1	
C305	Mylar	0.047	uF	100 V	J	3679473120	1	
C306	Electrolytic SG	22	uF	16 V	M	3479322031	1	
C307-C309	Electrolytic SG	10	uF	35 V	M	3479310061	3	
C310	Electrolytic SG	22	uF	16 V	M	3479322031	1	
C311	Chip	0.005	uF	50 V	K	3539472820	1	
C312	Electrolytic SG	0.47	uF	50 V	M	3479347871	1	
C313/C314	Electrolytic SG	4.7	uF	50 V	M	3479347971	2	
C315	Electrolytic SG	0.22	uF	50 V	M	3479322871	1	
C316	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C317	Electrolytic SG	220	uF	16 V	M	3479322131	1	
C318	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C319	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C320	Chip	0.006	uF	50 V	K	3539562820	1	
C321	Electrolytic SG	220	uF	10 V	M	3479322121	1	
C322	Mylar	0.047	uF	100 V	J	3679473120	1	
C323	Chip, CH	470	pF	50 V	J	3539471210	1	
C324	Chip	0.005	uF	50 V	J	3539472820	1	
C325	Chip	0.006	uF	50 V	K	3539562820	1	
C326	Mylar	0.68	uF	63 V	K	3679684297	1	
C327-C329	Mylar	0.22	uF	63 V	K	3679224297	3	
C330/C331	Electrolytic SG	4.7	uF	50 V	M	3479347971	2	
C332	Mylar	0.22	uF	63 V	K	3679224297	1	
C333-C336	Chip	0.1	uF	50 V	Z	3539104060	4	
C337/C338	Chip	0.022	uF	50 V	K	3539223820	2	
C339/C340	Mylar	0.1	uF	63 V	K	3679104297	2	
C341	Chip, CH	680	pF	50 V	J	3539681210	1	
C342	Chip	0.006	uF	50 V	K	3539562820	1	
C343	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C344	Chip	0.006	uF	50 V	K	3539562820	1	
C345	Chip, CH	470	pF	50 V	J	3539471210	1	
C346	Chip	0.1	uF	50 V	Z	3539104060	1	
C347	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C348/C349	Mylar	0.047	uF	100 V	J	3679473120	2	
C350	Chip	0.1	uF	50 V	Z	3539104060	1	
C351	Chip	0.003	uF	50 V	K	3539332820	1	
C352	Chip, CH	470	pF	50 V	J	3539471210	1	
C353	Electrolytic SG	220	uF	10 V	M	3479322121	1	
C354	Chip	0.1	uF	50 V	Z	3539104060	1	
C355/C356	Chip, CH	270	pF	50 V	J	3539271210	2	
C357/C358	Chip, CH	100	pF	50 V	J	3539101210	2	
C359	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C360	Chip	0.1	uF	50 V	Z	3539104060	1	
C361	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C362	Chip, CH	100	pF	50 V	J	3539101210	1	
C363	Chip, CH	680	pF	50 V	J	3539681210	1	
C364	Electrolytic SG	0.47	uF	50 V	M	3479347871	1	
C365	Chip	0.1	uF	50 V	Z	3539104060	1	
C366	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C367	Chip, CH	100	pF	50 V	J	3539101210	1	
C368	Chip, CH	680	pF	50 V	J	3539681210	1	
C369	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C370	Chip, CH	100	pF	50 V	J	3539101210	1	
C371	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C372	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C373	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C374	Electrolytic SG	0.47	uF	50 V	M	3479347871	1	
C711	Chip, CH	470	pF	50 V	J	3539471210	1	
C712	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C801	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C802	Chip	0.047	uF	50 V	Z	3539473060	1	
C803	Chip, CH	33	pF	50 V	J	3539330210	1	
C804	Chip	0.01	uF	50 V	K	3539103820	1	
C805	Chip, CH	33	pF	50 V	J	3539330210	1	
C806-C809	Chip	0.047	uF	50 V	Z	3539473060	4	
C810	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C811-C813	Chip, CH	100	pF	50 V	J	3539101210	3	
C814	Chip, CH	330	pF	50 V	J	3539331210	1	
C815	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C816	Chip	0.047	uF	50 V	Z	3539473060	1	
C817	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C818	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C819	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C820	Chip	0.022	uF	50 V	K	3539223820	1	
C821	Chip	0.047	uF	50 V	Z	3539473060	1	
C822	Mylar	0.047	uF	100 V	J	3679473120	1	
C823	Chip, CH	470	pF	50 V	J	3539471210	1	
C824	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C825	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C826	Chip	0.047	uF	50 V	Z	3539473060	1	
C827	Electrolytic SG	0.22	uF	50 V	M	3479322871	1	
C828/C829	Chip	0.01	uF	50 V	K	3539103820	2	
C830	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C831	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C832	Chip	0.047	uF	50 V	Z	3539473060	1	
C833	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C834/C835	Chip	0.047	uF	50 V	Z	3539473060	2	
C837	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C838	Chip	0.047	uF	50 V	Z	3539473060	1	
C839	CeramicTubular	0.001	uF	50 V	K	3519102935	1	
C840	Chip	0.047	uF	50 V	Z	3539473060	1	
C841	Chip, CH	470	pF	50 V	J	3539471210	1	
C842	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C843	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C844	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C845	Chip	120	pF	50 V	J	3539121210	1	
C846	Chip	0.002	uF	50 V	K	3539152820	1	KS,A
(C846)	Chip	0.001	uF	50 V	K	3539102820	1	D,PT INDO
C847	Chip	0.002	uF	50 V	K	3539152820	1	KS,A
(C847)	Chip	0.001	uF	50 V	K	3539102820	1	D,PT INDO
C848	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C849	Chip	0.002	uF	50 V	K	3539222820	1	
C850	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C851	Chip	0.002	uF	50 V	K	3539222820	1	
C852	Chip, CH	15	pF	50 V	J	3539150210	1	
C853	Chip	0.047	uF	50 V	Z	3539473060	1	D
(C853)	Not Used !							KS,PT INDO,A
C854	Chip	0.047	uF	50 V	Z	3539473060	1	D
(C854)	Not Used !							KS,PT INDO,A
C855	Chip, CH	180	pF	50 V	J	3539181210	1	D
(C855)	Not Used !							KS,PT INDO,A
C856	Chip, CH	33	pF	50 V	J	3539330210	1	D
(C856)	Not Used !							KS,PT INDO,A
C857	Chip, CH	470	pF	50 V	J	3539471210	1	
C858/C859	Chip, CH	100	pF	50 V	J	3539101210	2	D
(C858/C859	Not Used !							KS,PT INDO,A
	FILTERS							
CF801/802	SFE 10.7MA8-A					3978011001	2	KS,A
(CF801/802	SFE 10.7MS3G					3978011011	2	D,PT INDO
CF804	CFM2-450BL					3908001080	1	
	CONNECTORS							
CNT101	Lead Ass'y, 6P, 160mm					436106163761	1	
CNT102	Wafer, 13P					4428525340	1	
CNT103	Wafer, 13P					4428513820	1	
CNT104	Wafer, 15P					4428515820	1	
CNT105	Wafer, 9P					4428525300	1	
CNT401	Wire Trap, 5P					4428531105	1	KS,PT INDO
(CNT401)	Not Used !							D,A
CNT701	Wafer, FPC, 20P					4426001020	1	
CNT702	Wafer, FPC, 13P					4426001013	1	
	DIODES							
D101	1N4148, Switching					2058322101	1	
D102	Zener, UZ 5.1 BSB					2258599103	1	
D201	1N4148, Switching					2058322101	1	
D301/D302	1N4148, Switching					2058322101	2	
D708	1N4148, Switching					2058322101	1	
D709/D710	Zener, UZ 5.1 BSB					2258599103	2	
D801	Zener, UZ 5.1 BSB					2258599103	1	
D802-D805	1N4148, Switching					2058322101	4	
D806/D807	1N4148, Switching					2058322101	2	D
(D806/D807	Not Used !							KS,PT INDO,A
VD1/VD2	Varactor, SVC321SPA-C					2258817104	2	
VD3	Varactor, SVC321SPA-C					2258817104	1	D
(VD3)	Not Used !							KS,PT INDO,A
	INTEGRATED CIRCUITS							
IC101	LC7821					2168017132	1	
IC102	KIA4559S/KIA75559S					2168206103	1	
IC103	KIA7806PI, Regulator					2168606110	1	
IC201	LA7952, Video Switch					2168317136	1	
IC301	NJM2177AFB3					2169020000	1	
IC302	NJU9701					2168020117	1	
IC303	GD4053B					2138001117	1	
IC304	KIA4559P/KIA75559P					2168206104	1	
IC305	TC9176P					2138007124	1	
IC306	KIA4559S/KIA75559S					2168206103	1	
IC801	LA1266					2168017128	1	
IC802	LM7001M					2138017136	1	
IC803	AN7470					2168410101	1	
	TRANSISTORS							
Q101	DTC114YS					2208622106	1	
Q102	KRA107M/DTA114YS					2238006103	1	
Q103	KTA1273/KTA966A, PNP					2228106104	1	
Q104	BKTC3199Y, NPN					2208610109	1	
Q201/Q202	BKTC3199Y, NPN					2208610109	2	
Q203	DTC114TS					2208622108	1	
Q301/Q302	DTC323TS, NPN					2238422100	2	
Q303-Q305	KRA107M/DTA114YS					2238006103	3	
Q306/Q307	DTC114TS					2208622108	2	
Q702/Q703	DTC114TS					2208622108	2	
Q801	Chip, KTC3880					2207606002	1	
Q802/Q803	BKTC3199Y, NPN					2208610109	2	
Q804	KRA107M/DTA114YS					2238006103	1	
Q805/Q806	BKTC3199Y, NPN					2208610109	2	
Q807/Q808	KRA107M/DTA114YS					2238006103	2	
Q809-Q814	BKTC3199Y, NPN					2208610109	6	D
(Q809-Q81	Not Used !							KS,PT INDO,A
Q815	KRA107M/DTA114YS					2238006103	1	D
(Q815)	Not Used !							KS,PT INDO,A
	RESISTORS							
R101-R106	Chip	1	kohm	1/10 W	J	3099102870	6	
R107	Chip	5.6	kohm	1/10 W	J	3099562870	1	KS,PT INDO
(R107)	Chip	3.3	kohm	1/10 W	J	3099332870	1	D,A
R108	Chip	5.6	kohm	1/10 W	J	3099562870	1	KS,PT INDO
(R108)	Not Used !							D,A
R109	Chip	5.6	kohm	1/10 W	J	3099562870	1	KS,PT INDO
(R109)	Chip	3.3	kohm	1/10 W	J	3099332870	1	D,A
R110	Chip	5.6	kohm	1/10 W	J	3099562870	1	KS,PT INDO
(R110)	Not Used !							D,A
R111-R113	Metal Film	1	kohm	1/5 W	J	3029102970	3	
R114	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R115	Chip	51	kohm	1/10 W	J	3099513870	1	
R116	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	KS,PT INDO
(R116)	Not Used !							D,A
R117	Chip	4.7	kohm	1/10 W	J	3099472870	1	KS,PT INDO
(R117)	Chip	0	ohm	1/10 W	J	3099000870	1	D,A
R118	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R118)	Chip	1	kohm	1/10 W	J	3099102870	1	D,A
R119	Chip	2.4	kohm	1/10 W	J	3099242870	1	KS,PT INDO
(R119)	Not Used !							D,A
R120	Chip	51	kohm	1/10 W	J	3099513870	1	
R121	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	KS,PT INDO
(R121)	Not Used !							D,A
R122	Chip	4.7	kohm	1/10 W	J	3099472870	1	KS,PT INDO
(R122)	Chip	0	ohm	1/10 W	J	3099000870	1	D,A
R123	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R123)	Chip	1	kohm	1/10 W	J	3099102870	1	D,A
R124	Chip	2.4	kohm	1/10 W	J	3099242870	1	KS,PT INDO
(R124)	Not Used !							D,A
R125/R126	Metal Film	100	ohm	1/5 W	J	3029101970	2	
R127	Chip	47	kohm	1/10 W	J	3099473870	1	
R128	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R129	Metal Film	22	ohm	1 W	J	3029220470	1	
R130	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R201	Chip	22	ohm	1/10 W	J	3099220870	1	
R202-R204	Chip	68	ohm	1/10 W	J	3099680870	3	
R205	Metal Film	68	ohm	1/5 W	J	3029680970	1	
R206	Chip	47	kohm	1/10 W	J	3099473870	1	
R207	Chip	68	ohm	1/10 W	J	3099680870	1	
R208	Chip	47	kohm	1/10 W	J	3099473870	1	
R209/R210	Chip	390	ohm	1/10 W	J	3099391870	2	
R211	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R212/R213	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R301	Chip	6.8	kohm	1/10 W	J	3099682870	1	
R302	Chip	47	kohm	1/10 W	J	3099473870	1	
R303	Chip	15	kohm	1/10 W	J	3099153870	1	
R304	Chip	2.2	Mohm	1/10 W	J	3099225870	1	
R305	Chip	47	kohm	1/10 W	J	3099473870	1	
R306	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R307-R309	Chip	100	kohm	1/10 W	J	3099104870	3	
R311	Chip	27	ohm	1/10 W	J	3099270870	1	
R314	Chip	100	kohm	1/10 W	J	3099104870	1	
R315	Chip	15	kohm	1/10 W	J	3099153870	1	
R316/R317	Chip	8.2	kohm	1/10 W	J	3099822870	2	
R318	Chip	6.8	kohm	1/10 W	J	3099682870	1	
R319	Chip	330	kohm	1/10 W	J	3099334870	1	
R320	Chip	6.8	kohm	1/10 W	J	3099682870	1	
R321	Chip	47	kohm	1/10 W	J	3099473870	1	
R322	Chip	15	kohm	1/10 W	J	3099153870	1	
R323/R324	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R325	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R326	Chip	1.5	kohm	1/10 W	J	3099152870	1	
R327/R328	Carbon Film	33	kohm	1/5 W	J	3069333970	2	
R329	Carbon Film	180	kohm	1/5 W	J	3069184970	1	
R330	Chip	15	kohm	1/10 W	J	3099153870	1	
R331	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R332	Chip	8.2	kohm	1/10 W	J	3099822870	1	
R333	Chip	6.8	kohm	1/10 W	J	3099682870	1	
R334	Chip	18	kohm	1/10 W	J	3099183870	1	
R335	Chip	5.6	kohm	1/10 W	J	3099562870	1	
R336/R337	Chip	22	ohm	1/10 W	J	3099220870	2	
R338	Chip	15	kohm	1/10 W	J	3099153870	1	
R339	Chip	18	kohm	1/10 W	J	3099183870	1	
R340	Chip	15	kohm	1/10 W	J	3099153870	1	
R341	Chip	22	ohm	1/10 W	J	3099220870	1	
R342	Chip	1	Mohm	1/10 W	J	3099105870	1	
R343/R344	Chip	1	kohm	1/10 W	J	3099102870	2	
R345	Chip	4.7	kohm	1/10 W	J	3099472870	1	
R346/R347	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R348	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R349	Chip	100	kohm	1/10 W	J	3099104870	1	
R350	Chip	1.8	kohm	1/10 W	J	3099182870	1	
R351	Chip	8.2	kohm	1/10 W	J	3099822870	1	
R352	Chip	100	kohm	1/10 W	J	3099104870	1	
R353	Chip	1.8	kohm	1/10 W	J	3099182870	1	
R354	Chip	8.2	kohm	1/10 W	J	3099822870	1	
R355/R356	Chip	330	ohm	1/10 W	J	3099331870	2	
R358	Chip	100	kohm	1/10 W	J	3099104870	1	
R359	Chip	10	kohm	1/10 W	J	3099103870	1	
R712	Chip	22	kohm	1/10 W	J	3099223870	1	
R713	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R714	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R715	Chip	4.7	kohm	1/10 W	J	3099472870	1	
R716	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R717/R718	Chip	5.6	kohm	1/10 W	J	3099562870	2	
R719-R721	Chip	1	kohm	1/10 W	J	3099102870	3	
R722/R723	Metal Film	3.3	ohm	1/5 W	J	3029339970	2	
R801	Chip	100	ohm	1/10 W	J	3099101870	1	
R802	Chip	1	kohm	1/10 W	J	3099102870	1	
R803	Chip	560	ohm	1/10 W	J	3099561870	1	
R804	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R805	Chip	330	ohm	1/10 W	J	3099331870	1	
R806	Chip	470	ohm	1/10 W	J	3099471870	1	KS,D,A
(R806)	Chip	330	ohm	1/10 W	J	3099331870	1	PT INDO
R807	Chip	10	kohm	1/10 W	J	3099103870	1	
R808	Chip	3.3	kohm	1/10 W	J	3099332870	1	

Model No. : TX-757

Ref. No.	Description		Part No.	Q'ty	Version
R809	Carbon Film	18 kohm 1/5 W J	3069183970	1	KS,A
(R809)	Carbon Film	47 kohm 1/5 W J	3069473970	1	D,PT INDO
R810	Chip	22 ohm 1/10 W J	3099220870	1	
R811	Chip	2.4 kohm 1/10 W J	3099243870	1	
R812	Chip	10 kohm 1/10 W J	3099103870	1	
R813	Chip	68 kohm 1/10 W J	3099683870	1	
R814	Chip	4.7 kohm 1/10 W J	3099472870	1	
R815	Chip	33 ohm 1/10 W J	3099330870	1	
R816	Metal Film	240 ohm 1/5 W J	3029241970	1	
R817	Metal Film	330 ohm 1/5 W J	3029331970	1	
R818	Chip	2 kohm 1/10 W J	3099202870	1	KS,A
(R818)	Chip	3.9 kohm 1/10 W J	3099392870	1	D,PT INDO
R819	Chip	2.2 kohm 1/10 W J	3099222870	1	
R820	Chip	22 kohm 1/10 W J	3099223870	1	KS,PT INDO,A
(R820)	Chip	12 kohm 1/10 W J	3099123870	1	D
R821	Chip	68 ohm 1/10 W J	3099680870	1	
R822	Chip	100 kohm 1/10 W J	3099104870	1	
R823	Chip	47 kohm 1/10 W J	3099473870	1	
R824	Chip	1 kohm 1/10 W J	3099102870	1	
R825	Chip	560 ohm 1/10 W J	3099561870	1	
R826	Chip	10 kohm 1/10 W J	3099103870	1	
R827	Carbon Film	5.6 kohm 1/5 W J	3069562970	1	
R828/R829	Chip	100 ohm 1/10 W J	3099101870	2	
R831	Chip	47 kohm 1/10 W J	3099473870	1	KS,A
(R831)	Chip	33 kohm 1/10 W J	3099333870	1	D,PT INDO
R832	Chip	22 kohm 1/10 W J	3099223870	1	KS,A
(R832)	Chip	27 kohm 1/10 W J	3099273870	1	D,PT INDO
R833	Chip	22 kohm 1/10 W J	3099223870	1	KS,A
(R833)	Chip	27 kohm 1/10 W J	3099273870	1	D,PT INDO
R834	Chip	8.2 kohm 1/10 W J	3099822870	1	KS,A
(R834)	Chip	5.6 kohm 1/10 W J	3099562870	1	D,PT INDO
R835	Chip	10 kohm 1/10 W J	3099103870	1	
R836	Chip	8.2 kohm 1/10 W J	3099822870	1	KS,A
(R836)	Chip	5.6 kohm 1/10 W J	3099562870	1	D,PT INDO
R837	Chip	1 kohm 1/10 W J	3099102870	1	
R838/R839	Chip	56 kohm 1/10 W J	3099563870	2	
R840-R842	Chip	3.3 kohm 1/10 W J	3099332870	3	
R843	Chip	10 kohm 1/10 W J	3099103870	1	KS,A
(R843)	Chip	3.3 kohm 1/10 W J	3099332870	1	D,PT INDO
R844	Chip	3.3 kohm 1/10 W J	3099332870	1	
R845	Chip	10 kohm 1/10 W J	3099103870	1	KS,A
(R845)	Chip	3.3 kohm 1/10 W J	3099332870	1	D,PT INDO
R846/R847	Metal Film	3.9 kohm 1/5 W J	3029392970	2	
R848	Chip	15 kohm 1/10 W J	3099153870	1	
R849	Chip	1 kohm 1/10 W J	3099102870	1	
R850	Chip	6.8 kohm 1/10 W J	3099682870	1	
R851	Chip	100 kohm 1/10 W J	3099104870	1	
R852	Chip	3.3 kohm 1/10 W J	3099332870	1	KS,A
(R852)	Chip	1.8 kohm 1/10 W J	3099182870	1	D,PT INDO
R853	Carbon Film	100 kohm 1/5 W J	3069104970	1	D
(R853)	Not Used !				A,KS,PT INDO
R854	Chip	56 kohm 1/10 W J	3099563870	1	D
(R854)	Not Used !				KS,PT INDO,A
R855	Chip	100 kohm 1/10 W J	3099104870	1	D
(R855)	Not Used !				KS,PT INDO,A
R856/R857	Chip	47 kohm 1/10 W J	3099473870	1	D
(R856/R857	Not Used !				KS,PT INDO,A
R858	Chip	1 Mohm 1/10 W J	3099105870	1	D
(R858)	Not Used !				KS,PT INDO,A
R859	Chip	100 kohm 1/10 W J	3099104870	1	
R860/R861	Chip	47 kohm 1/10 W J	3099473870	2	D
R862/R863	Carbon Film	47 kohm 1/5 W J	3069473970	2	D
R860-R863	Chip	47 kohm 1/10 W J	3099473870	4	D
(R860-R863	Not Used !				KS,PT INDO,A
	COILS				
L701	Inductor, 1 mH 03		2648610283	1	
L801	Inductor, 20.8mH		2648601430	1	D
(L801)	Not Used !				KS,PT INDO,A
T801	AM-ANT		2608201120	1	
T802	AM-OSC		2638201150	1	
T803	FM-DET-A		2838501110	1	
T804	FM-DET-B		2838501210	1	
T805	AM-IFT		2848001250	1	
T806/T807	MPX, 19 kHz, FB-7SG		2658301100	2	
T808	LW ANT		2608201130	1	D
(T808)	Not Used !				KS,PT INDO,A
T809	LW OSC		2638401060	1	D
(T809)	Not Used !				KS,PT INDO,A
	SEMI FIXED RESISTORS				
VR801	2 kohm (B)		3248020243	1	
VR802	50 kohm		3248050343	1	KS,PT INDO,A
(VR802)	20 kohm		3248020343	1	D

Ref. No.	Description		Part No.	Q'ty	Version
VR803	5 kohm (B)		3248050243	1	
VR804	200 kohm		3248020443	1	
	MISCELLANEOUS				
X301	Resonator, CSA2.00MG-TF21		3938124001	1	
X801	Crystal, 7.2MHz		3978101031	1	
TC801	Trimmer, 10P		3838001140	1	
TC803	Trimmer, 10P		3838001140	1	D
(TC803)	Not Used !				KS,PT INDO,A
17	Heatsink Regulator TR.		7505206210	1	
18	Jack RCA, 2P		4438103020	1	
19	Jack RCA, 9P		4438114510	1	
20	Jack RCA, 2P		4438103010	1	
21	Terminal Antenna, 4P		4408107120	1	A,KS,PT INDO
(21)	Terminal Antenna, 4P		4408108220	1	D
22	Shield Plate		6165151910	1	A,KS,PT INDO
(22)	Not Used !				D
27	Shield Fence, Front-end		6163115510	1	A,KS,PT INDO
(27)	Not Used !				D
FRONT-EN	Front -End, FTH4-460V		3928101850	1	D
FRONT-EN	**ASSEMBLY P.C.BOARD FRONT END**		**054002009835**	**1**	KS,PT INDO,A
C81	CAP, CeramicTubular,	8.2 pF 50 V K	3511825235	1	
C83	CAP, CeramicTubular	100 pF 50 V J	3519101935	1	
C84	CAP, CeramicTubular	0.001 uF 50 V Z	3519102935	1	
C85	CAP, CeramicTubular,	3.9 pF 50 V K	3511395235	1	
C86	CAP, CeramicTubular,	5.6 pF 50 V K	3511565235	1	
C87	CAP, CeramicTubular,	2.2 pF 50 V K	3511225235	1	
C88	CAP, CeramicTubular,	18 pF 50 V J	3511186135	1	
C89	CAP, CeramicTubular	0.001 uF 50 V Z	3519102935	1	
C90	CAP, CeramicTubular,	8.2 pF 50 V K	3511825235	1	
C91	CAP, CeramicTubular,	3.3 pF 50 V K	3511335235	1	
C92	CAP, CeramicTubular	15 pF 50 V J	3519150935	1	
L81	Coil, Inductor, 0.47 uH		2648647882	1	
L82	Coil, Inductor, 2.2 uH		2648622982	1	
Q81	TR, KSC2786R		2208406128	1	
Q82/Q83	TR, KTC3193-0, NPN		2208406125	2	
Q84	FET, 2SK544		2218217000	1	
R81	RES, Carbon Film	100 kohm 1/5 W J	3069104970	1	
R82/R83	RES, Carbon Film	33 kohm 1/5 W J	3069333970	2	
R84	RES, Metal Film	220 ohm 1/5 W J	3029221970	1	
R85	RES, Carbon Film	330 kohm 1/5 W J	3069334970	1	
R86/R87	RES, Metal Film	390 ohm 1/5 W J	3029391970	2	
R88	RES, Carbon Film	560 kohm 1/5 W J	3069564970	1	
R89	RES, Carbon Film	33 kohm 1/5 W J	3069333970	1	
R90	RES, Metal Film	390 ohm 1/5 W J	3029391970	1	
R91	RES, Carbon Film	680 kohm 1/5 W J	3069684970	1	
VD81-VD83	Vractor, SVC211SPA-C		2258817103	3	
PCB2	**ASSEMBLY P.C.BOARD MIC (KS, PT INDO AREA ONLY)**				
	CAPACITORS				
C401	Electrolytic SG	4.7 uF 50 V M	3479347971	1	
C402	Chip, CH	220 pF 50 V J	3539221210	1	
C403	Electrolytic SG	10 uF 35 V M	3479310061	1	
C404	Electrolytic SG	4.7 uF 50 V M	3479347971	1	
C405	Electrolytic SSE	4.7 uF 16 V M	3479147935	1	
C406	Chip	0.006 uF 50 V K	3539562820	1	
C407	Electrolytic SG	4.7 uF 50 V M	3479347971	1	
C408	Chip, CH	560 pF 50 V J	3539561210	1	
C409	Electrolytic SG	4.7 uF 50 V M	3479347971	1	
C410	Chip	0.033 uF 50 V K	3539333820	1	
C411	Chip	0.006 uF 50 V K	3539562820	1	
C412	Chip, CH	560 pF 50 V J	3539561210	1	
C413/C414	Chip	0.047 uF 50 V Z	3539473060	2	
C415	Chip	0.01 uF 50 V K	3539103820	1	
C416/C417	Electrolytic SG	0.33 uF 50 V M	3479333871	2	
C418	Chip	0.01 uF 50 V K	3539103820	1	
C419	Electrolytic SG	10 uF 35 V M	3479310061	1	
C420	Chip, CH	220 pF 50 V J	3539221210	1	
C421	Electrolytic SSE	4.7 uF 16 V M	3479147935	1	
C422/C423	Electrolytic SG	47 uF 16 V M	3479347031	2	
C424	Chip	0.047 uF 50 V Z	3539473060	1	
C425	Electrolytic SG	47 uF 16 V M	3479347031	1	
C426	Electrolytic SG	4.7 uF 50 V M	3479347971	1	
C427	Electrolytic SG	100 uF 10 V M	3479310121	1	
	CONNECTOR				
CNT401	Lead Ass'y, 5P, 180mm		436405180732	1	
	INTEGRATED CIRCUITS				
IC401	KIA4559S/KIA75559S		2168206103	1	
IC402	ES56028E, Digital Echo		2138633001	1	

Ref. No.	Description		Part No.	Q'ty	Version
	RESISTORS				
R401	Chip	0 ohm 1/10 W J	3099000870	1	
R402	Chip	4.7 kohm 1/10 W J	3099472870	1	
R403	Chip	1 kohm 1/10 W J	3099102870	1	
R404	Chip	100 kohm 1/10 W J	3099104870	1	
R405	Chip	10 kohm 1/10 W J	3099103870	1	
R406	Chip	15 kohm 1/10 W J	3099153870	1	
R407	Chip	8.2 kohm 1/10 W J	3099822870	1	
R408	Chip	12 kohm 1/10 W J	3099123870	1	
R409	Chip	3.3 kohm 1/10 W J	3099332870	1	
R410	Chip	12 kohm 1/10 W J	3099123870	1	
R411	Chip	15 kohm 1/10 W J	3099153870	1	
R412	Chip	10 kohm 1/10 W J	3099103870	1	
R413	Chip	15 kohm 1/10 W J	3099153870	1	
R414	Chip	6.8 kohm 1/10 W J	3099682870	1	
R415	Chip	68 kohm 1/10 W J	3099683870	1	
R416	Chip	6.8 kohm 1/10 W J	3099682870	1	
R417	Chip	68 kohm 1/10 W J	3099683870	1	
R418	Chip	27 kohm 1/10 W J	3099273870	1	
R419	Chip	560 ohm 1/10 W J	3099561870	1	
R420	Chip	15 kohm 1/10 W J	3099153870	1	
R421/R422	Chip	330 ohm 1/10 W J	3099331870	2	
R423	Chip	1 kohm 1/10 W J	3099102870	1	
R424	Chip	100 kohm 1/10 W J	3099104870	1	
R425	Chip	47 kohm 1/10 W J	3099473870	1	
R426	Metal Film	10 ohm 1/5 W J	3029100970	1	
R427	Carbon Film	15 kohm 1/5 W J	3069153970	1	
	MISCELLANEOUS				
8	Jack Phone		4438005510	1	
9	Shield Fence		6165146110	1	
10(VR401)	Volume Mic, 10 kohm		3208052410	1	
PCB3	**ASSEMBLY P.C.BOARD POWER**				
C501-C503	Mylar	0.047 uF 100 V J	3679473120	3	
C504	Electroiytic SD	4700 uF 25 V M	3409347248	1	
C505	Electrolytic SG	1 uF 50 V M	3479310971	1	
C506	Ceramic Tubular	0.022 uF 25 V Z	3579223530	1	KS,PT INDO
(C506)	Not Used !				D,A
C507	Electrolytic SG	1 uF 50 V M	3479310971	1	KS,PT INDO
(C507)	Not Used !				D,A
D501/D502	1N4003, Rectifier		2058512108	2	
D503	1N4148, Switching		2058322101	1	KS,PT INDO
(D503)	Not Used !				D,A
IC501	KIA7808PI, Regulator		2168606116	1	
IC502	KIA7805PI, Regulator		2108499104	1	KS,PT INDO
(IC502)	Not Used !				D,A
R501	Metal Film	3.3 ohm 2 W J	3029339570	1	KS,PT INDO
(R501)	Not Used !				D,A
PCB4	**ASSEMBLY P.C.BOARD FRONT**				
	CAPACITORS				
C702/C703	Chip	0.047 uF 50 V Z	3539473060	2	
C704	Electrolytic SSE	47 uF 10 V M	3479147025	1	
C705	Electric Back-up	0.047 F 5.5 V	3438247315	1	
C706	Chip	0.1 uF 50 V Z	3539104060	1	
C707	Chip	22 pF 50 V Z	3539220210	1	
C708	Trimmer, CH	10 pF	3838001140	1	
C709	Chip, CH	33 pF 50 V J	3539330210	1	
C710	Electrolytic SSE	10 uF 16 V M	3479110035	1	
C713/C714	Chip	0.1 uF 50 V Z	3539104060	2	
	CONNECTORS				
CNT701	Wafer, FPC, 20P		4426001120	1	
CNT702	Wafer, 13P		4428513826	1	
CNT703	Lead Ass'y, 4P, 80mm		436404080732	1	
	DIODES				
D701-D707	1N4148, Switching		2058322101	7	
	INTEGRATED CIRCUIT				
IC701	CXP82324-331Q, CPU, DEP-449		2139322704	1	
	COIL				
L702	Inductor, 1 mH 03		2648610283	1	
	TRANSISTOR				
Q701	BKTC3199Y, NPN		2208610109	1	
	RESISTORS				
R701	Chip	100 kohm 1/10 W J	3099104870	1	
R702-R706	Carbon Film	100 kohm 1/5 W J	3069104970	5	

Ref. No.	Description		Part No.	Q'ty	Version
R707	Carbon Film	10 kohm 1/5 W J	3069103970	1	
R708	Chip	10 kohm 1/10 W J	3099103870	1	
R709-R711	Carbon Film	100 kohm 1/5 W J	3069104970	3	
	MISCELLANEOUS				
X701	Crystal, 10MHz		3978011001	1	
FL701	FL Display, CM1361C		2328002306	1	
28	Switch Tact		4658003710	14	
PCB5	**ASSEMBLY P.C.BOARD RMC**				
29	Switch Tact		4658004010	1	
C701	CAP, Electrolytic SG	10 uF 35 V	3479310061	1	
CNT703	Connector, Wire Trap, 5P		4428531104	1	
IC702	TFMT4380, Remote Sensor		2408005001	1	

Model No. : TX-747

Ref. No.	Description					Part No.	Q'ty	Version
PCB1	**ASSEMBLY P.C.BOARD MAIN**							
	CAPACITORS							
C101	Chip	0.1	uF	50 V	Z	3539104060	1	
C102	Chip, CH	100	pF	50 V	J	3539101210	1	
C103	Chip	0.047	uF	50 V	Z	3539473060	1	
C104	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C105	Chip	0.047	uF	50 V	Z	3539473060	1	
C107	Chip, CH	220	pF	50 V	J	3539221210	1	KS,PT INDO
(C107)	Not Used !							D,A
C108	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C110	Chip, CH	220	pF	50 V	J	3539221210	1	KS,PT INDO
(C110)	Not Used !							D,A
C111/C112	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C113	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	KS,PT INDO
(C113)	Not Used !							D,A
C114	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C115-C118	Chip, CH	100	pF	50 V	J	3539101210	4	D
(C115-C118)	Not Used !							KS,PT INDO,A
C711	Chip, CH	470	pF	50 V	J	3539471210	1	
C712	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C801	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C802	Chip	0.047	uF	50 V	Z	3539473060	1	
C803	Chip, CH	33	pF	50 V	J	3539330210	1	
C804	Chip	0.01	uF	50 V	K	3539103820	1	
C805	Chip, CH	33	pF	50 V	J	3539330210	1	
C806-C809	Chip	0.047	uF	50 V	Z	3539473060	4	
C810	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C811-C813	Chip, CH	100	pF	50 V	J	3539101210	3	
C814	Chip, CH	330	pF	50 V	J	3539331210	1	
C815	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C816	Chip	0.047	uF	50 V	Z	3539473060	1	
C817	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C818	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C819	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C820	Chip	0.022	uF	50 V	K	3539223820	1	
C821	Chip	0.047	uF	50 V	Z	3539473060	1	
C822	Mylar	0.047	uF	100 V	J	3679473120	1	
C823	Chip, CH	470	pF	50 V	J	3539471210	1	
C824	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C825	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C826	Chip	0.047	uF	50 V	Z	3539473060	1	
C827	Electrolytic SG	0.22	uF	50 V	M	3479322871	1	
C828/C829	Chip	0.01	uF	50 V	K	3539103820	2	
C830	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C831	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C832	Chip	0.047	uF	50 V	Z	3539473060	1	
C833	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C834/C835	Chip	0.047	uF	50 V	Z	3539473060	2	
C837	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C838	Chip	0.047	uF	50 V	Z	3539473060	1	
C839	CeramicTubular	0.001	uF	50 V	K	3519102935	1	
C840	Chip	0.047	uF	50 V	Z	3539473060	1	
C841	Chip, CH	470	pF	50 V	J	3539471210	1	
C842	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C843	Electrolytic SG	100	uF	16 V	M	3479310131	1	
C844	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C845	Chip	120	pF	50 V	J	3539121210	1	
C846	Chip	0.002	uF	50 V	K	3539152820	1	KS,A
(C846)	Chip	0.001	uF	50 V	K	3539102820	1	D,PT INDO
C847	Chip	0.002	uF	50 V	K	3539152820	1	KS,A
(C847)	Chip	0.001	uF	50 V	K	3539102820	1	D,PT INDO
C848	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C849	Chip	0.002	uF	50 V	K	3539222820	1	
C850	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C851	Chip	0.002	uF	50 V	K	3539222820	1	
C852	Chip, CH	15	pF	50 V	J	3539150210	1	
C853	Chip	0.047	uF	50 V	Z	3539473060	1	D
(C853)	Not Used !							KS,PT INDO,A
C854	Chip	0.047	uF	50 V	Z	3539473060	1	D
(C854)	Not Used !							KS,PT INDO,A
C855	Chip, CH	180	pF	50 V	J	3539181210	1	D
(C855)	Not Used !							KS,PT INDO,A
C856	Chip, CH	33	pF	50 V	J	3539330210	1	D
(C856)	Not Used !							KS,PT INDO,A
C857	Chip, CH	470	pF	50 V	J	3539471210	1	
C858/C859	Chip, CH	100	pF	50 V	J	3539101210	2	D
(C858/C859	Not Used !							KS,PT INDO,A
	FILTERS							
CF801/802	SFE 10.7MA8-A					3978011001	2	KS,A
(CF801/802)	SFE 10.7MS3G					3978011011	2	D,PT INDO
CF804	CFM2-450BL					3908001080	1	
	CONNECTORS							
CNT101	Lead Ass'y, 6P, 160mm					36106163761	1	
CNT102	Wafer, 13P					4428525340	1	
CNT103	Wafer, 13P					4428513820	1	
CNT104	Wafer, 15P					4428515820	1	
CNT105	Wafer, 9P					4428525300	1	
CNT401	Wire Trap, 5P					4428531105	1	KS,PT INDO
(CNT401)	Not Used !							D,A
CNT701	Wafer, FPC, 20P					4426001020	1	
	DIODES							
D101	1N4148, Switching					2058322101	1	
D102	Zener, UZ 5.1 BSB					2258599103	1	
D708	1N4148, Switching					2058322101	1	
D709/D710	Zener, UZ 5.1 BSB					2258599103	2	
D801	Zener, UZ 5.1 BSB					2258599103	1	
D802-D805	1N4148, Switching					2058322101	4	
D806/D807	1N4148, Switching					2058322101	2	D
(D806/D807)	Not Used !							KS,PT INDO,A
VD1/VD2	Varactor, SVC321SPA-C					2258817104	2	
VD3	Varactor, SVC321SPA-C					2258817104	1	D
(VD3)	Not Used !							KS,PT INDO,A
	INTEGRATED CIRCUITS							
IC101	LC7821					2168017132	1	
IC102	KIA4559S/KIA75559S					2168206103	1	
IC103	KIA7806PI, Regulator					2168606110	1	KS,PT INDO
(IC103)	Not Used !							D,A
IC801	LA1266					2168017128	1	
IC802	LM7001M					2138017136	1	
IC803	AN7470					2168410101	1	
	TRANSISTORS							
Q101	DTC114YS					2208622106	1	
Q102	KRA107M/DTA114YS					2238006103	1	
Q103	2SA1515					2208722102	1	
Q104	BKTC3199Y, NPN					2208610109	1	
Q702/Q703	DTC114TS					2208622108	2	
Q801	Chip, KTC3880					2207606002	1	
Q802/Q803	BKTC3199Y, NPN					2208610109	2	
Q804	KRA107M/DTA114YS					2238006103	1	
Q805/Q806	BKTC3199Y, NPN					2208610109	2	
Q807/Q808	KRA107M/DTA114YS					2238006103	2	
Q809-Q814	BKTC3199Y, NPN					2208610109	6	D
(Q809-Q814)	Not Used !							KS,PT INDO,A
Q815	KRA107M/DTA114YS					2238006103	1	D
(Q815)	Not Used !							KS,PT INDO,A
	RESISTORS							
R101/R102	Chip	1	kohm	1/10 W	J	3099102870	2	
R111-R113	Metal Film	1	kohm	1/5 W	J	3029102970	3	
R114	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R115	Chip	51	kohm	1/10 W	J	3099513870	1	
R116	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	KS,PT INDO
(R116)	Not Used !							D,A
R117	Chip	4.7	kohm	1/10 W	J	3099472870	1	KS,PT INDO
(R117)	Chip	0	ohm	1/10 W	J	3099000870	1	D,A
R118	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R118)	Chip	1	kohm	1/10 W	J	3099102870	1	D,A
R119	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R119)	Not Used !							D,A
R120	Chip	51	kohm	1/10 W	J	3099513870	1	
R121	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	KS,PT INDO
(R121)	Not Used !							D,A
R122	Chip	4.7	kohm	1/10 W	J	3099472870	1	KS,PT INDO
(R122)	Chip	0	ohm	1/10 W	J	3099000870	1	D,A
R123	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R123)	Chip	1	kohm	1/10 W	J	3099102870	1	D,A
R124	Chip	2.2	kohm	1/10 W	J	3099222870	1	KS,PT INDO
(R124)	Not Used !							D,A
R125/R126	Metal Film	100	ohm	1/5 W	J	3029101970	2	
R127	Chip	47	kohm	1/10 W	J	3099473870	1	
R128	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R129	Metal Film	22	ohm	1 W	J	3029220470	1	KS,PT INDO
(R129)	Not Used !							D,A
R130	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R712	Chip	22	kohm	1/10 W	J	3099223870	1	
R713	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R714	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R715	Chip	4.7	kohm	1/10 W	J	3099472870	1	
R716	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R717/R718	Chip	5.6	kohm	1/10 W	J	3099562870	2	
R719-R721	Chip	1	kohm	1/10 W	J	3099102870	3	
R722/R723	Metal Film	3.3	ohm	1/5 W	J	3029339970	2	
R801	Chip	100	ohm	1/10 W	J	3099101870	1	
R802	Chip	1	kohm	1/10 W	J	3099102870	1	
R803	Chip	560	ohm	1/10 W	J	3099561870	1	
R804	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R805	Chip	330	ohm	1/10 W	J	3099331870	1	
R806	Chip	470	ohm	1/10 W	J	3099471870	1	KS,D,A
(R806)	Chip	330	ohm	1/10 W	J	3099331870	1	PT INDO
R807	Chip	10	kohm	1/10 W	J	3099103870	1	
R808	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R809	Carbon Film	18	kohm	1/5 W	J	3069183970	1	KS,A
(R809)	Carbon Film	47	kohm	1/5 W	J	3069473970	1	D,PT INDO
R810	Chip	22	ohm	1/10 W	J	3099220870	1	
R811	Chip	2.4	kohm	1/10 W	J	3099243870	1	
R812	Chip	10	kohm	1/10 W	J	3099103870	1	
R813	Chip	68	kohm	1/10 W	J	3099683870	1	
R814	Chip	4.7	kohm	1/10 W	J	3099472870	1	
R815	Chip	33	ohm	1/10 W	J	3099330870	1	
R816	Metal Film	240	ohm	1/5 W	J	3029241970	1	
R817	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R818	Chip	2	kohm	1/10 W	J	3099202870	1	KS,A
(R818)	Chip	3.9	kohm	1/10 W	J	3099392870	1	D,PT INDO
R819	Chip	2.2	kohm	1/10 W	J	3099222870	1	
R820	Chip	22	kohm	1/10 W	J	3099223870	1	KS,PT INDO,A
(R820)	Chip	12	kohm	1/10 W	J	3099123870	1	D
R821	Chip	68	ohm	1/10 W	J	3099680870	1	
R822	Chip	100	kohm	1/10 W	J	3099104870	1	
R823	Chip	47	kohm	1/10 W	J	3099473870	1	
R824	Chip	1	kohm	1/10 W	J	3099102870	1	
R825	Chip	560	ohm	1/10 W	J	3099561870	1	
R826	Chip	10	kohm	1/10 W	J	3099103870	1	
R827	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R828/R829	Chip	100	ohm	1/10 W	J	3099101870	2	
R831	Chip	47	kohm	1/10 W	J	3099473870	1	KS,A
(R831)	Chip	33	kohm	1/10 W	J	3099333870	1	D,PT INDO
R832	Chip	22	kohm	1/10 W	J	3099223870	1	KS,A
(R832)	Chip	27	kohm	1/10 W	J	3099273870	1	D,PT INDO
R833	Chip	22	kohm	1/10 W	J	3099223870	1	KS,A
(R833)	Chip	27	kohm	1/10 W	J	3099273870	1	D,PT INDO
R834	Chip	8.2	kohm	1/10 W	J	3099822870	1	KS,A
(R834)	Chip	5.6	kohm	1/10 W	J	3099562870	1	D,PT INDO
R835	Chip	10	kohm	1/10 W	J	3099103870	1	
R836	Chip	8.2	kohm	1/10 W	J	3099822870	1	KS,A
(R836)	Chip	5.6	kohm	1/10 W	J	3099562870	1	D,PT INDO
R837	Chip	1	kohm	1/10 W	J	3099102870	1	
R838/R839	Chip	56	kohm	1/10 W	J	3099563870	2	
R840-R842	Chip	3.3	kohm	1/10 W	J	3099332870	3	
R843	Chip	10	kohm	1/10 W	J	3099103870	1	KS,A
(R843)	Chip	3.3	kohm	1/10 W	J	3099332870	1	D,PT INDO
R844	Chip	3.3	kohm	1/10 W	J	3099332870	1	
R845	Chip	10	kohm	1/10 W	J	3099103870	1	KS,A
(R845)	Chip	3.3	kohm	1/10 W	J	3099332870	1	D,PT INDO
R846/R847	Metal Film	3.9	kohm	1/5 W	J	3029392970	2	
R848	Chip	15	kohm	1/10 W	J	3099153870	1	
R849	Chip	1	kohm	1/10 W	J	3099102870	1	
R850	Chip	6.8	kohm	1/10 W	J	3099682870	1	
R851	Chip	100	kohm	1/10 W	J	3099104870	1	
R852	Chip	3.3	kohm	1/10 W	J	3099332870	1	KS,A
(R852)	Chip	1.8	kohm	1/10 W	J	3099182870	1	D,PT INDO
R853	Carbon Film	100	kohm	1/5 W	J	3069104970	1	D
(R853)	Not Used !							KS,PT INDO,A
R854	Chip	56	kohm	1/10 W	J	3099563870	1	D
(R854)	Not Used !							KS,PT INDO,A
R855	Chip	100	kohm	1/10 W	J	3099104870	1	D
(R855)	Not Used !							KS,PT INDO,A
R856/R857	Chip	47	kohm	1/10 W	J	3099473870	1	D
(R856/R857	Not Used !							KS,PT INDO,A
R858	Chip	1	Mohm	1/10 W	J	3099105870	1	D
(R858)	Not Used !							KS,PT INDO,A
R859	Chip	100	kohm	1/10 W	J	3099104870	1	
R860/R861	Chip	47	kohm	1/10 W	J	3099473870	1	D
R862/863	Carbon Film	47	kohm	1/5 W	J	3069473970	1	D
(R860-R863)	Not Used !							KS,PT INDO,A
	COILS							
L701	Inductor, 1 mH 04					2648610284	1	
L801	Iductor, 20.8mH					2648601430	1	D
(L801)	Not Used !							KS,PT INDO,A
T801	AM-ANT					2608201120	1	
T802	AM-OSC					2638201150	1	
T803	FM-DET-A					2838501110	1	
T804	FM-DET-B					2838501210	1	
T805	AM-IFT					2848001250	1	
T806/T807	MPX, 19 kHz, FB-7SG					2658301100	2	
T808	LW ANT					2608201130	1	D
(T808)	Not Used !							KS,PT INDO,A
T809	LW OSC					2638401060	1	D
(T809)	Not Used !							KS,PT INDO,A
	SEMI FIXED RESISTORS							
VR801	2 kohm (B)					3248020243	1	
VR802	50 kohm					3248050343	1	KS,PT INDO,A
(VR802)	20 kohm					3248020343	1	D
VR803	5 kohm (B)					3248050243	1	
VR804	200 kohm					3248020443	1	
	MISCELLANEOUS							
X801	Crystal, 7.2MHz					3978101031	1	
TC801	Trimmer, 10P					3838001140	1	
TC803	Trimmer, 10P					3838001140	1	D
(TC803)	Not Used !							KS,PT INDO,A
17	Heatsink Regulator TR.					7505206210	1	KS,PT INDO
(17)	Not Used !							D,A
20	Jack RCA, 2P					4438103010	1	
21	Terminal Antenna, 4P					4408107120	1	A,KS,PT INDO
(21)	Terminal Antenna, 4P					4408108220	1	D
22	Shield Plate					6165151910	1	A,KS,PT INDO
(22)	Not Used !							D
27	Shield Fence, Front-end					6163115510	1	A,KS,PT INDO
(27)	Not Used !							D
FRONT-EN	Front -End, FTH4-460V					3928101850	1	D
FRONT-EN	**ASSEMBLY PCB FRONT END**					**54002009835**	**1**	**KS,PT INDO,A**
C81	CAP, CeramicTubular,	8.2	pF	50 V	K	3511825235	1	
C83	CAP, CeramicTubular	100	pF	50 V	J	3519101935	1	
C84	CAP, CeramicTubular	0.001	uF	50 V	Z	3519102935	1	
C85	CAP, CeramicTubular,	3.9	pF	50 V	K	3511395235	1	
C86	CAP, CeramicTubular,	5.6	pF	50 V	K	3511565235	1	
C87	CAP, CeramicTubular,	2.2	pF	50 V	K	3511225235	1	
C88	CAP, CeramicTubular,	18	pF	50 V	J	3511186135	1	
C89	CAP, CeramicTubular	0.001	uF	50 V	Z	3519102935	1	
C90	CAP, CeramicTubular,	8.2	pF	50 V	K	3511825235	1	
C91	CAP, CeramicTubular,	3.3	pF	50 V	K	3511335235	1	
C92	CAP, CeramicTubular	15	pF	50 V	J	3519150935	1	
L81	Coil, Inductor, 0.47 uH					2648647882	1	
L82	Coil, Inductor, 2.2 uH					2648622982	1	
Q81	TR, KSC2786R					2208406128	1	
Q82/Q83	TR, KTC3193-0, NPN					2208406125	2	
Q84	FET, 2SK544					2218217000	1	
R81	RES, Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R82/R83	RES, Carbon Film	33	kohm	1/5 W	J	3069333970	2	
R84	RES, Metal Film	220	ohm	1/5 W	J	3029221970	1	
R85	RES, Carbon Film-	330	kohm	1/5 W	J	3069334970	1	
R86/R87	RES, Metal Film	390	ohm	1/5 W	J	3029391970	2	
R88	RES, Carbon Film	560	kohm	1/5 W	J	3069564970	1	
R89	RES, Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R90	RES, Metal Film	390	ohm	1/5 W	J	3029391970	1	
R91	RES, Carbon Film	680	kohm	1/5 W	J	3069684970	1	
VD81-VD83	Vractor, SVC211SPA-C					2258817103	3	
PCB2	**ASSEMBLY P.C.BOARD MIC (KS, PT INDO AREA ONLY)**							
	CAPACITORS							
C401	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C402	Chip, CH	220	pF	50 V	J	3539221210	1	
C403	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C404	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C405	Electrolytic SSE	4.7	uF	16 V	M	3479147935	1	
C406	Chip	0.006	uF	50 V	K	3539562820	1	
C407	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C408	Chip, CH	560	pF	50 V	J	3539561210	1	
C409	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C410	Chip	0.033	uF	50 V	K	3539333820	1	
C411	Chip	0.006	uF	50 V	K	3539562820	1	
C412	Chip, CH	560	pF	50 V	J	3539561210	1	
C413/C414	Chip	0.047	uF	50 V	Z	3539473060	2	
C415	Chip	0.01	uF	50 V	K	3539103820	1	
C416/C417	Electrolytic SG	0.33	uF	50 V	M	3479333871	2	
C418	Chip	0.01	uF	50 V	K	3539103820	1	
C419	Electrolytic SG	10	uF	35 V	M	3479310061	1	
C420	Chip, CH	220	pF	50 V	J	3539221210	1	
C421	Electrolytic SSE	4.7	uF	16 V	M	3479147935	1	
C422/C423	Electrolytic SG	47	uF	16 V	M	3479347031	2	
C424	Chip	0.047	uF	50 V	Z	3539473060	1	
C425	Electrolytic SG	47	uF	16 V	M	3479347031	1	
C426	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C427	Electrolytic SG	100	uF	10 V	M	3479310121	1	

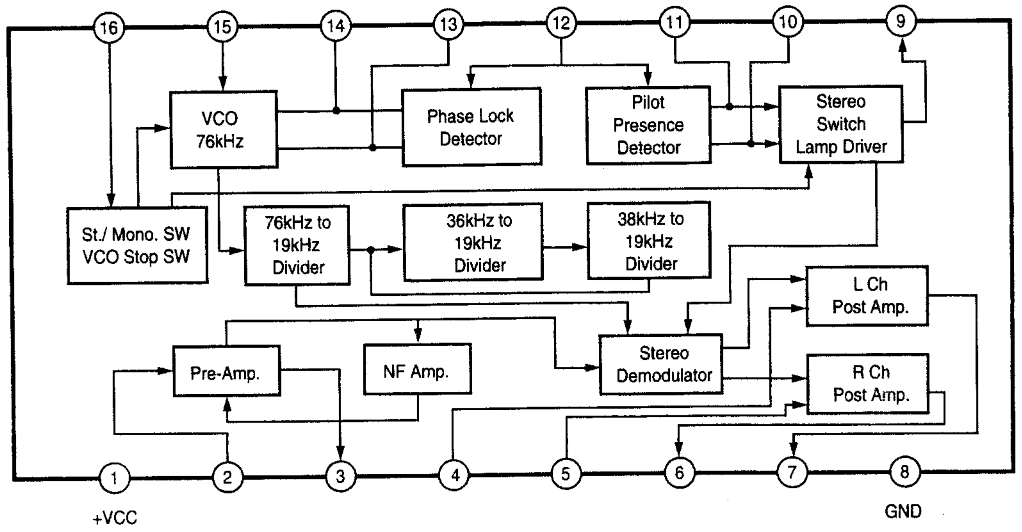
Model No. : TX-747

Ref. No.	Description		Part No.	Q'ty	Version
	CONNECTOR				
CNT401	Lead Ass'y, 5P, 180mm		36405180732	1	
	INTEGRATED CIRCUITS				
IC401	KIA4559S/KIA75559S		2168206103	1	
IC402	ES56028E, Digital Echo		2138633001	1	
	RESISTORS				
R401	Chip	0 ohm 1/10 W J	3099000870	1	
R402	Chip	4.7 kohm 1/10 W J	3099472870	1	
R403	Chip	1 kohm 1/10 W J	3099102870	1	
R404	Chip	100 kohm 1/10 W J	3099104870	1	
R405	Chip	10 kohm 1/10 W J	3099103870	1	
R406	Chip	15 kohm 1/10 W J	3099153870	1	
R407	Chip	8.2 kohm 1/10 W J	3099822870	1	
R408	Chip	12 kohm 1/10 W J	3099123870	1	
R409	Chip	3.3 kohm 1/10 W J	3099332870	1	
R410	Chip	12 kohm 1/10 W J	3099123870	1	
R411	Chip	15 kohm 1/10 W J	3099153870	1	
R412	Chip	10 kohm 1/10 W J	3099103870	1	
R413	Chip	15 kohm 1/10 W J	3099153870	1	
R414	Chip	6.8 kohm 1/10 W J	3099682870	1	
R415	Chip	68 kohm 1/10 W J	3099683870	1	
R416	Chip	6.8 kohm 1/10 W J	3099682870	1	
R417	Chip	68 kohm 1/10 W J	3099683870	1	
R418	Chip	27 kohm 1/10 W J	3099273870	1	
R419	Chip	560 ohm 1/10 W J	3099561870	1	
R420	Chip	15 kohm 1/10 W J	3099153870	1	
R421/R422	Chip	330 ohm 1/10 W J	3099331870	2	
R423	Chip	1 kohm 1/10 W J	3099102870	1	
R424	Chip	100 kohm 1/10 W J	3099104870	1	
R425	Chip	47 kohm 1/10 W J	3099473870	1	
R426	Metal Film	10 ohm 1/5 W J	3029100970	1	
R427	Carbon Film	15 kohm 1/5 W J	3069153970	1	
	MISCELLANEOUS				
8	Jack Phone		4438005510	1	
9	Shield Fence		6165146110	1	
10	Volume Mic, 10 kohm		3208052410	1	
PCB3	**ASSEMBLY P.C.BOARD POWER**				
C501-C503	Mylar	0.047 uF 100 V J	3679473120	3	
C504	Electrolytic SD	4700 uF 25 V M	3409347248	1	
C505	Electrolytic SG	1 uF 50 V M	3479310971	1	
C506	Ceramic Tubular	0.022 uF 25 V Z	3579223530	1	KS,PT INDO D,A
(C506)	Not Used !				
C507	Electrolytic SG	1 uF 50 V M	3479310971	1	KS,PT INDO D,A
(C507)	Not Used !				
D501/D502	1N4003, Rectifier		2058512108	2	
D503	1N4148, Switching		2058322101	1	KS,PT INDO D,A
(D503)	Not Used !				
IC501	KIA7808PI. Regulator		2168606116	1	
IC502	KIA7805PI, Regulator		2108499104	1	KS,PT INDO D,A
(IC502)	Not Used !				
R501	Metal Film	3.3 ohm 2 W J	3029339570	1	KS,PT INDO D,A
(R501)	Not Used !				
CP501	Wafer, 6P		4428505810	1	
PCB4	**ASSEMBLY P.C.BOARD FRONT**				
	CAPACITORS				
C702/C703	Chip	0.047 uF 50 V Z	3539473060	2	
C704	Electrolytic SSE	47 uF 10 V M	3479147025	1	
C705	Electric Back-up	0.047 F 5.5 V	3438247315	1	
C706	Chip	0.1 uF 50 V Z	3539104060	1	
C707	Chip, CH	22 pF 50 V J	3539220210	1	
C708	Trimmer, CH	10 pF	3838001140	1	
C709	Chip, CH	33 pF 50 V J	3539330210	1	
C710	Electrolytic SSE	10 uF 16 V M	3479110035	1	
C713/C714	Chip	0.1 uF 50 V Z	3539104060	2	
	CONNECTORS				
CNT701	Wafer, FPC, 20P		4426001120	1	
CNT703	Lead Ass'y, 4P, 80mm		36404080732	1	
	DIODES				
D701-D707	1N4148, Switching		2058322101	7	
	INTEGRATED CIRCUIT				
IC701	CXP82324-331Q, CPU, DWP449		2139322704	1	
	COIL				
L702	Inductor, 1 mH 03		2648610283	1	

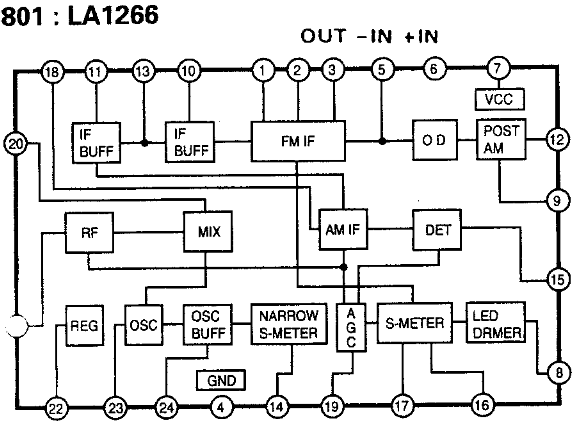
Ref. No.	Description		Part No.	Q'ty	Version
	TRANSISTOR				
Q701	BKTC3199Y, NPN		2208610109	1	
	RESISTORS				
R701	Chip	100 kohm 1/10 W J	3099104870	1	
R702-R706	Carbon Film	100 kohm 1/5 W J	3069104970	5	
R707	Carbon Film	10 kohm 1/5 W J	3069103970	1	
R708	Chip	10 kohm 1/10 W J	3099103870	1	
R709-R711	Carbon Film	100 kohm 1/5 W J	3069104970	3	
	MISCELLANEOUS				
X701	Crystal, 10MHz		3978011001	1	
FL701	FL Display, CM1361C		2328002306	1	
28	Switch Tact		4658003710	11	
PCB5	**ASSEMBLY P.C.BOARD RMC**				
C701	CAP, Electrolytic SG	10 uF 35 V	3479310061	1	
CNT703	Connector, Wire Trap, 5P		4428531104	1	
IC702	TFMT4380, Remote Sensor		2408005001	1	
29	Switch Tact		4658004010	1	

IC FUNCTIONAL BLOCK DIAGRAM

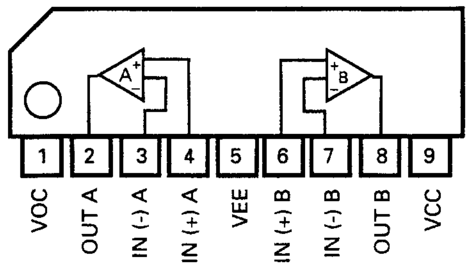
IC803 : AN7470


16
15
14
13
12
11
10
9
VCO
76kHz
Phase Lock
Detector
Pilot
Presence
Detector
Stereo
Switch
Lamp Driver
St./ Mono. SW
VCO Stop SW
76kHz to
19kHz
Divider
36kHz to
19kHz
Divider
38kHz to
19kHz
Divider
L Ch
Post Amp.
Pre-Amp.
NF Amp.
Stereo
Demodulator
R Ch
Post Amp.
1
2
3
4
5
6
7
8
+VCC
GND

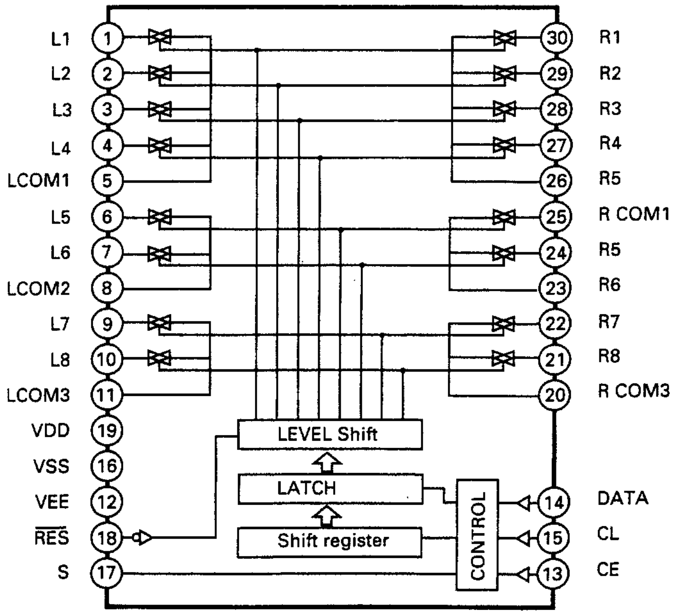
IC801 : LA1266


OUT -IN +IN
18
11
13
10
1
2
3
5
6
7
VCC
20
IF
BUFF
IF
BUFF
FM IF
O D
POST
AM
12
9
RF
MIX
AM IF
DET
15
REG
OSC
OSC
BUFF
NARROW
S-METER
AGC
S-METER
LED
DRMER
8
GND
22
23
24
4
14
19
17
16

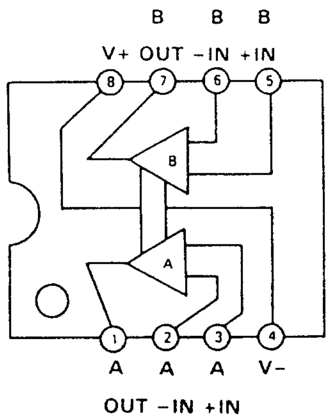
IC102, IC306, IC401 : KIA4559S/KIA75559S


A
B
1
2
3
4
5
6
7
8
9
VOC
OUT A
IN (-) A
IN (+) A
VEE
IN (+) B
IN (-) B
OUT B
VCC

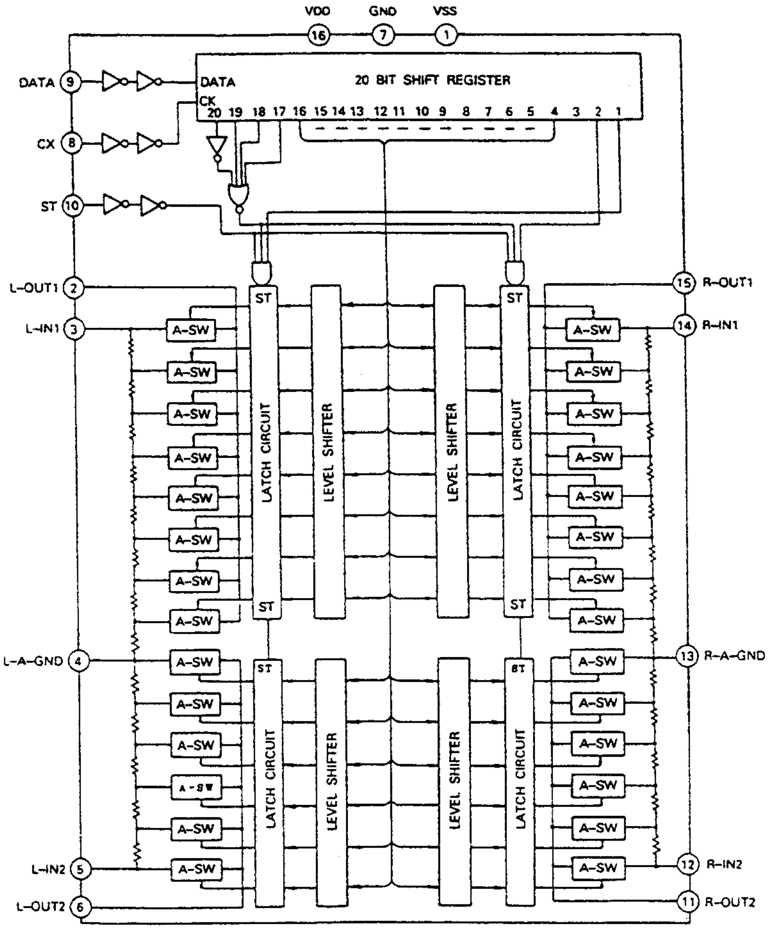
IC101 : LC7821


L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
VSS
VEE
RES
S
1
2
3
4
5
6
7
8
9
10
11
19
16
12
18
17
30
29
28
27
26
25
24
23
22
21
20
14
15
13
R1
R2
R3
R4
R5
R COM1
R5
R6
R7
R8
R COM3
DATA
CL
CE
LEVEL Shift
LATCH
Shift register
CONTROL

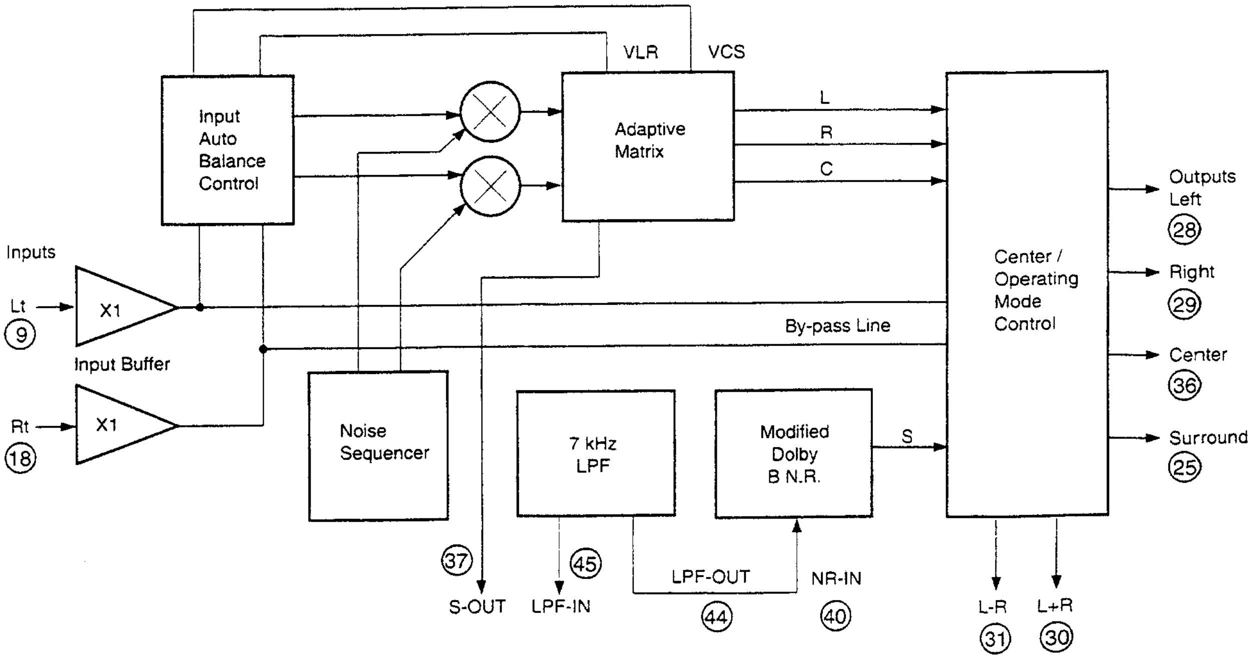
IC304 : KIA4559S/KIA75559P


B B B
V+ OUT -IN +IN
8
7
6
5
B
A
1
2
3
4
A A A V-
OUT -IN +IN

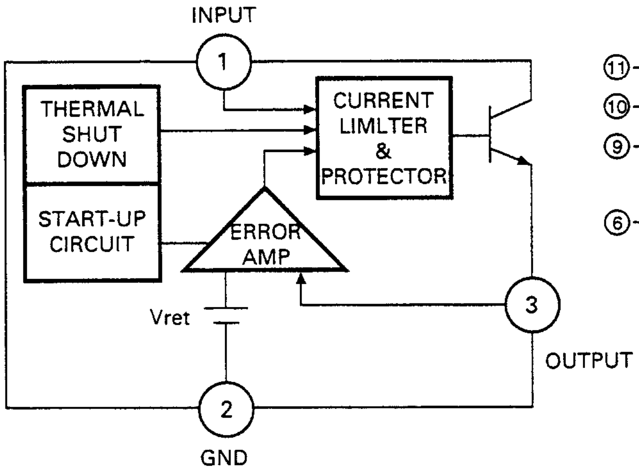
IC305 : TC9176P


VDD
GND
VSS
16
7
1
DATA 9
CX 8
ST 10
DATA
CK
20 BIT SHIFT REGISTER
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
L-OUT1 2
L-IN1 3
L-A-GND 4
L-IN2 5
L-OUT2 6
A-SW
ST
LATCH CIRCUIT
LEVEL SHIFTER
R-OUT1 15
R-IN1 14
R-A-GND 13
R-IN2 12
R-OUT2 11

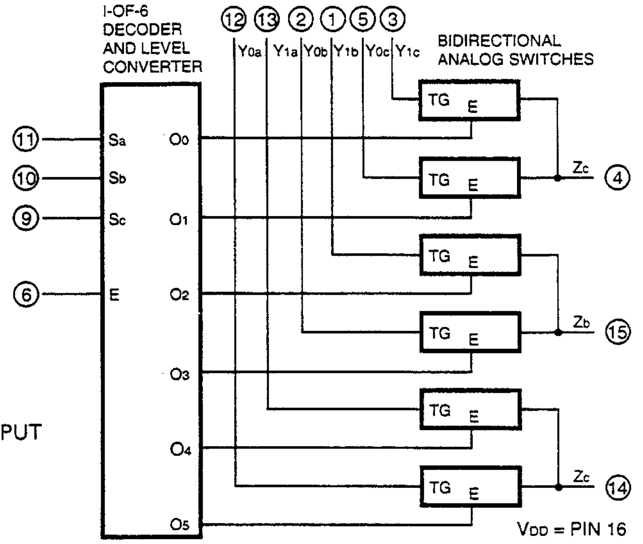
IC301 : NJM2177FB3


VLR
VCS
Input Auto Balance Control
Adaptive Matrix
L
R
C
Center / Operating Mode Control
Outputs Left 28
Right 29
Center 36
Surround 25
Inputs
Lt 9
X1
Input Buffer
Rt 18
X1
By-pass Line
Noise Sequencer
7 kHz LPF
Modified Dolby B N.R.
S
37 S-OUT
45 LPF-IN
LPF-OUT 44
NR-IN 40
L-R 31
L+R 30

IC502 : KIA7805PI
IC103 : KIA7806PI
IC501 : KIA7808PI

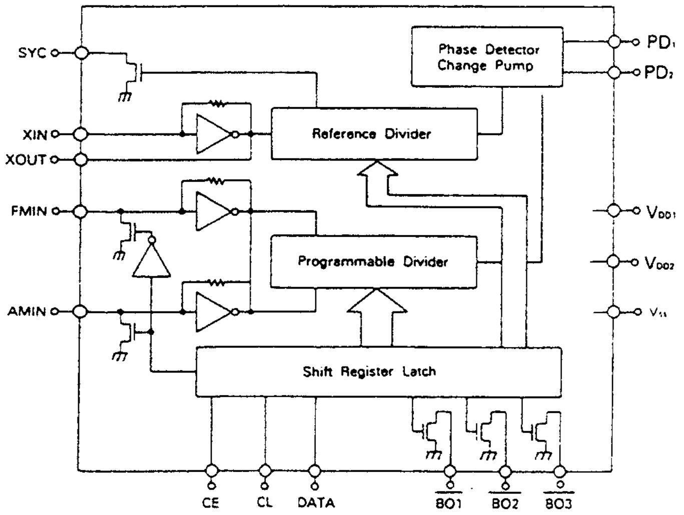

INPUT
1
THERMAL SHUT DOWN
START-UP CIRCUIT
CURRENT LIMLTER & PROTECTOR
ERROR AMP
Vret
3
OUTPUT
2
GND

IC303 : GD4053B


I-OF-6 DECODER AND LEVEL CONVERTER
⑫ ⑬ ② ① ⑤ ③
Y0a Y1a Y0b Y1b Y0c Y1c
BIDIRECTIONAL ANALOG SWITCHES
⑪ Sa
⑩ Sb
⑨ Sc
⑥ E
O0
O1
O2
O3
O4
O5
TG E
Zc ④
Zb ⑮
Zc ⑭

VDD = PIN 16
VSS = PIN 8
VEE = PIN 7
O = PIN NUMBER

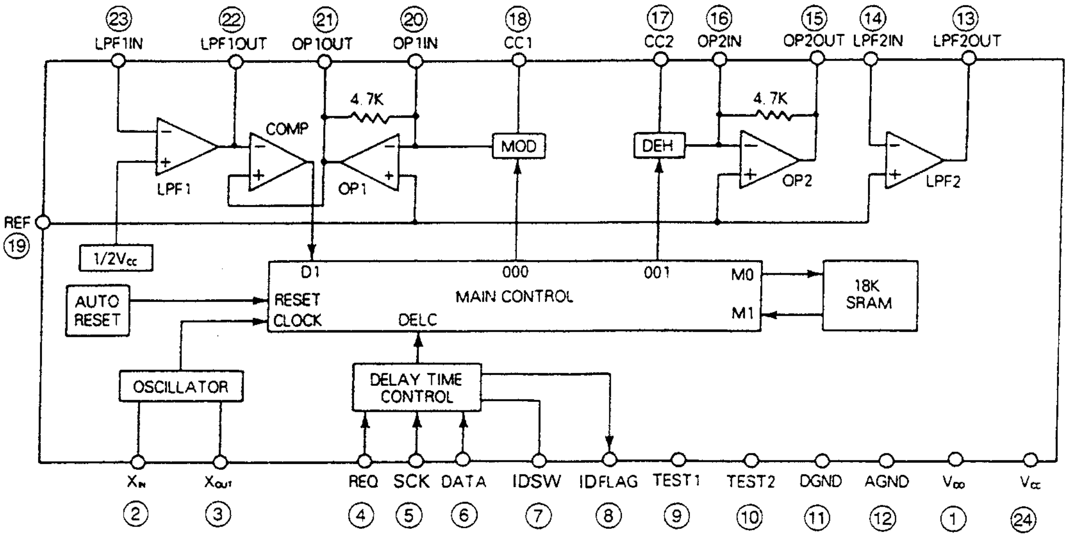
IC802 : LM7001M


SYC
XIN
XOUT
FMIN
AMIN
Phase Detector Change Pump
PD1
PD2
Reference Divider
Programmable Divider
Shift Register Latch
VDD1
VDD2
VSS
CE
CL
DATA
BO1
BO2
BO3

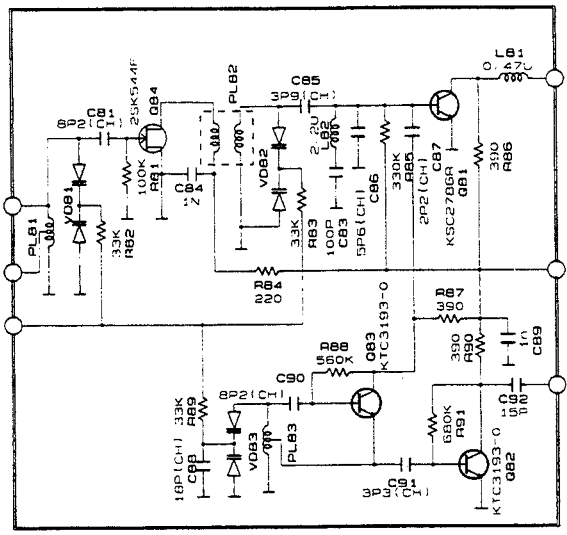
Pin Name

No	LM 7001	LM7001M
1	XOUT	XOUT
2	XIN	XIN
3	CE	NC
4	CL	CE
5	DATA	CL
6	$\overline{\text{SYC}}$	DATA
7	$\overline{\text{BO1}}$	$\overline{\text{SYC}}$
8	$\overline{\text{BO2}}$	$\overline{\text{BO1}}$
9	$\overline{\text{BO3}}$	$\overline{\text{BO2}}$
10	AMIN	$\overline{\text{BO3}}$
11	FMIN	NC
12	VDD1	AMIN
13	VDD2	NC
14	PD1	FMIN
15	PD2	NC
16	VSS	VDD1
17		VDD2
18		PD1
19		PD2
20		VSS

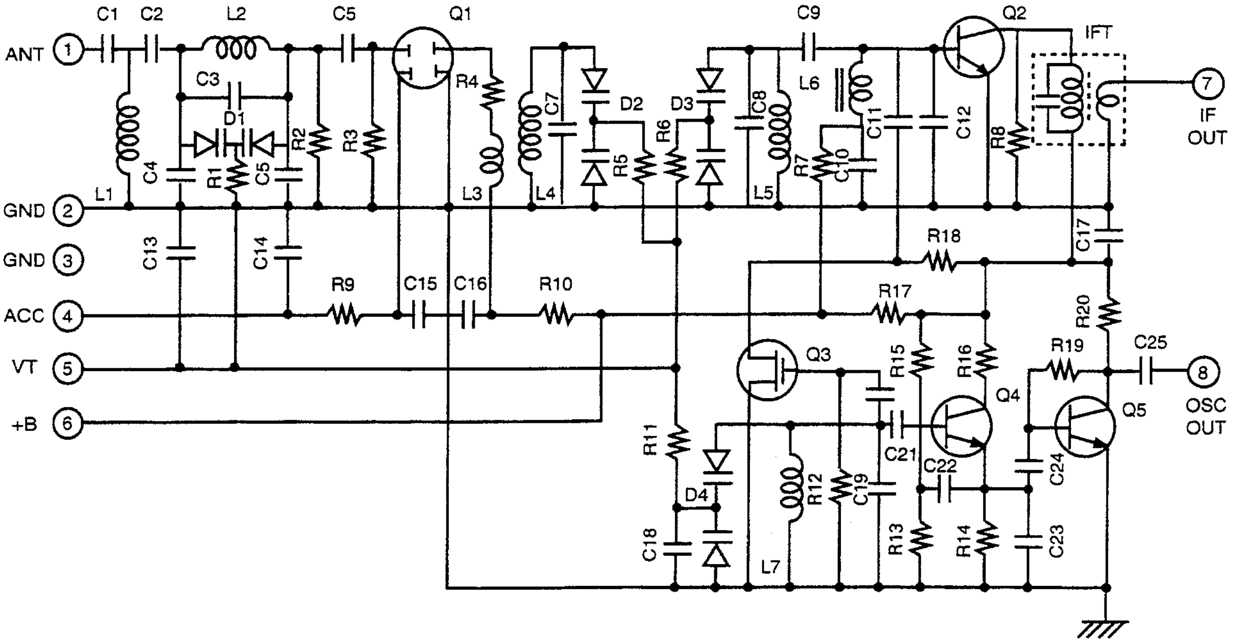
IC302 : NJU9701


㉓ LPF1IN
㉒ LPF1OUT
㉑ OP1OUT
⑳ OP1IN
⑱ CC1
⑰ CC2
⑯ OP2IN
⑮ OP2OUT
⑭ LPF2IN
⑬ LPF2OUT
4.7K
COMP
LPF1
OP1
MOD
DEH
OP2
LPF2
REF ⑲
1/2Vcc
AUTO RESET
D1
000
001
M0
M1
RESET
CLOCK
DELC
MAIN CONTROL
18K SRAM
OSCILLATOR
DELAY TIME CONTROL
XIN ②
XOUT ③
REQ ④
SCK ⑤
DATA ⑥
IDSW ⑦
IDFLAG ⑧
TEST1 ⑨
TEST2 ⑩
DGND ⑪
AGND ⑫
VDD ①
Vcc ㉔

FM FRONT - END (A, PT INDO, KS VERSION)


ANT
ANT
VT
OUT
VCC
OSC
PL81
VD81
33K
R82
C81
8P2(CH)
2SK544F
Q84
100K
R81
C84
PL82
VD82
33K
R83
C85
3P9(CH)
2.2U
L82
100P
C83
5P6(CH)
C86
330K
R85
2P2(CH)
C87
KSC2786R
Q81
L81
0.47U
390
R86
R84
220
R87
390
390
R90
1n
C89
R88
560K
Q83
KTC3193-O
C90
8P2(CH)
33K
R89
18P(CH)
C88
VD83
PL83
C91
3P3(CH)
680K
R91
C92
15P
KTC3193-O
Q82

FM FRONT - END
FTA4 - 460V (D Version)

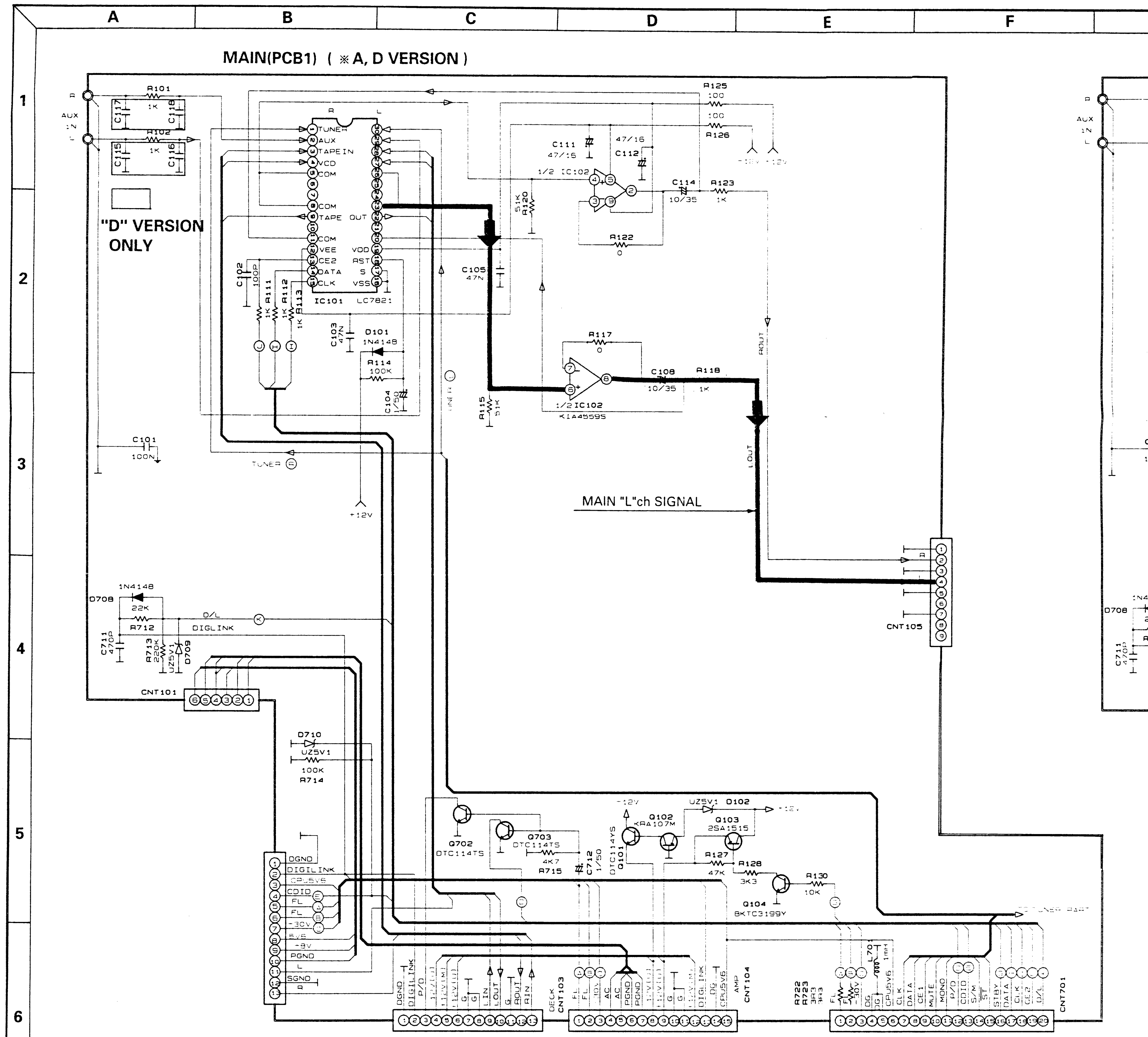

ANT ①
GND ②
GND ③
ACC ④
VT ⑤
+B ⑥
⑦ IF OUT
⑧ OSC OUT
C1
C2
L2
C5
Q1
C9
Q2
IFT
C3
D1
L1
C4
R1
C5
R2
R3
R4
L3
L4
C7
D2
R5
D3
R6
C8
L5
L6
R7
C10
C11
C12
R8
C13
C14
R9
C15
C16
R10
R18
R17
C17
R20
Q3
R15
R16
R19
C25
Q4
Q5
R11
D4
C18
L7
R12
C19
C20
C21
C22
C24
R13
R14
C23

Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content
IFT	10.7 MHz	C1	22 pF	C11	1 pF	C21	8 pF	R1	33 kΩ	R11	33 kΩ	Q1	3SK 180
		C2	15 pF	C12	22 pF	C22	27 pF	R2	100 kΩ	R12	10 kΩ	Q2	2SC3142
L6	2.2 or 1 MHz	C3	0~5 pF	C13	22 pF	C23	20 pF	R3	100 kΩ	R13	10 kΩ	Q3	2SK 543
		C4	18 pF	C14	22 nF	C24	2 pF	R4	22~330 Ω	R14	1~1.8 kΩ	Q4	2SC2814
L1~L5, L7	AIR WIL	C5	7 pF	C15	0~22 nF	C25	15 pF	R5	33 kΩ	R15	10 kΩ	Q5	2SC2814
		C6	7 pF	C16	22 nF			R6	33 kΩ	R16	330 Ω	D1	KV1440
		C7	4~10 pF	C17	22 nF			R7	1~3.3 MΩ	R17	100 Ω	D2	KV1440
		C8	0~7 pF	C18	33~68 pF			R8	-	R18	470 Ω	D3	KV1440
		C9	5 pF	C19	0~5 pF			R9	10 kΩ	R19	330 kΩ	D4	KV1440
		C10	100 or 220 pF	C20	2 pF			R10	100~1 kΩ	R20	330 Ω		

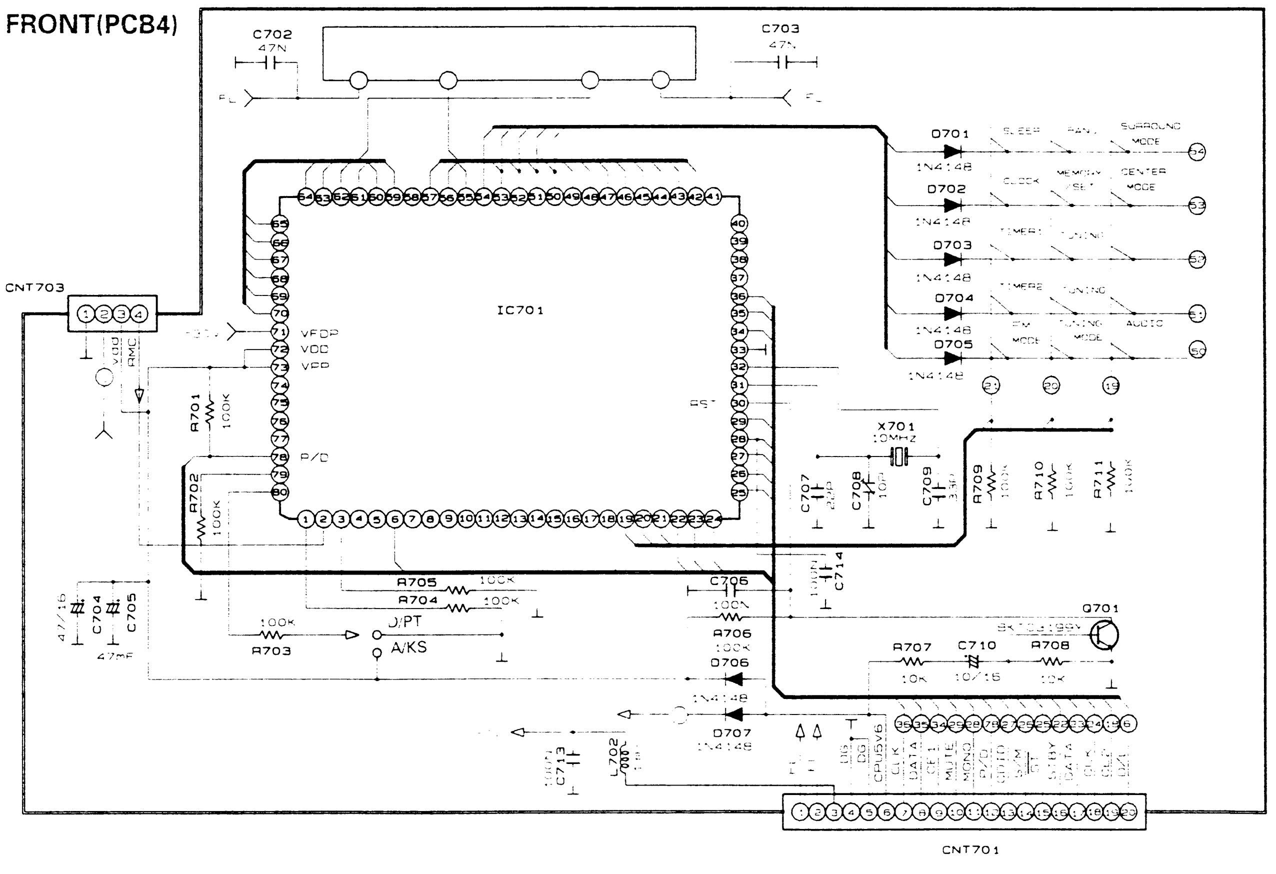
NOTE

SCHEMATIC DIAGRAM I

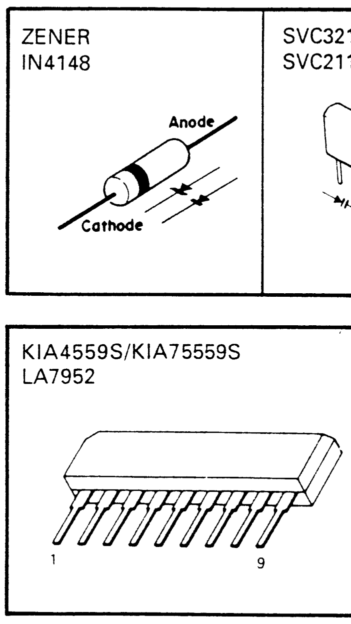
MAIN(PCB1) (※A, D VERSION)


A
B
C
D
E
F
1
2
3
4
5
6
AUX IN
R101 1K
R102 1K
C117
C118
C115
C116
"D" VERSION ONLY
C101 100N
TUNER
AUX
TAPE IN
VCO
COM
TAPE OUT
VEE
CE2
DATA
CLK
VDD
RST
VSS
IC101 LC7821
C102 100P
R111 1K
R112 1K
R113 1K
C103 47N
D101 1N4148
R114 100K
C104 1/50
+12V
C105 47N
R115 51K
R120 51K
R125 100
R126 100
C111 47/16
C112 47/16
1/2 IC102
C114 10/35
R123 1K
R122 0
R117 0
C108 10/35
R118 1K
1/2 IC102 KIA4559S
ROUT
LOUT
MAIN "L"ch SIGNAL
CNT105
D708 1N4148
R712 22K
D/L
DIGLINK
C711 470P
R713 220K
UZ5V1 D709
CNT101
D710 UZ5V1
R714 100K
Q702 DTC114TS
Q703 DTC114TS
R715 4K7
C712 1/50
Q101 DTC114YS
Q102 KRA107M
Q103 2SA1515
UZ5V1 D102
R127 47K
R128 3K3
Q104 BKTC3199Y
R130 10K
DGND
DIGILINK
CPU5V6
CDID
FL
-30V
5V6
+8V
PGND
SGND
P/D
LIN
LOUT
ROUT
RIN
DECK CNT103
AC
AMP CNT104
L701
R722
R723
CLK
DATA
CE1
MUTE
MONO
STBY
CNT701

FRONT(PCB4)

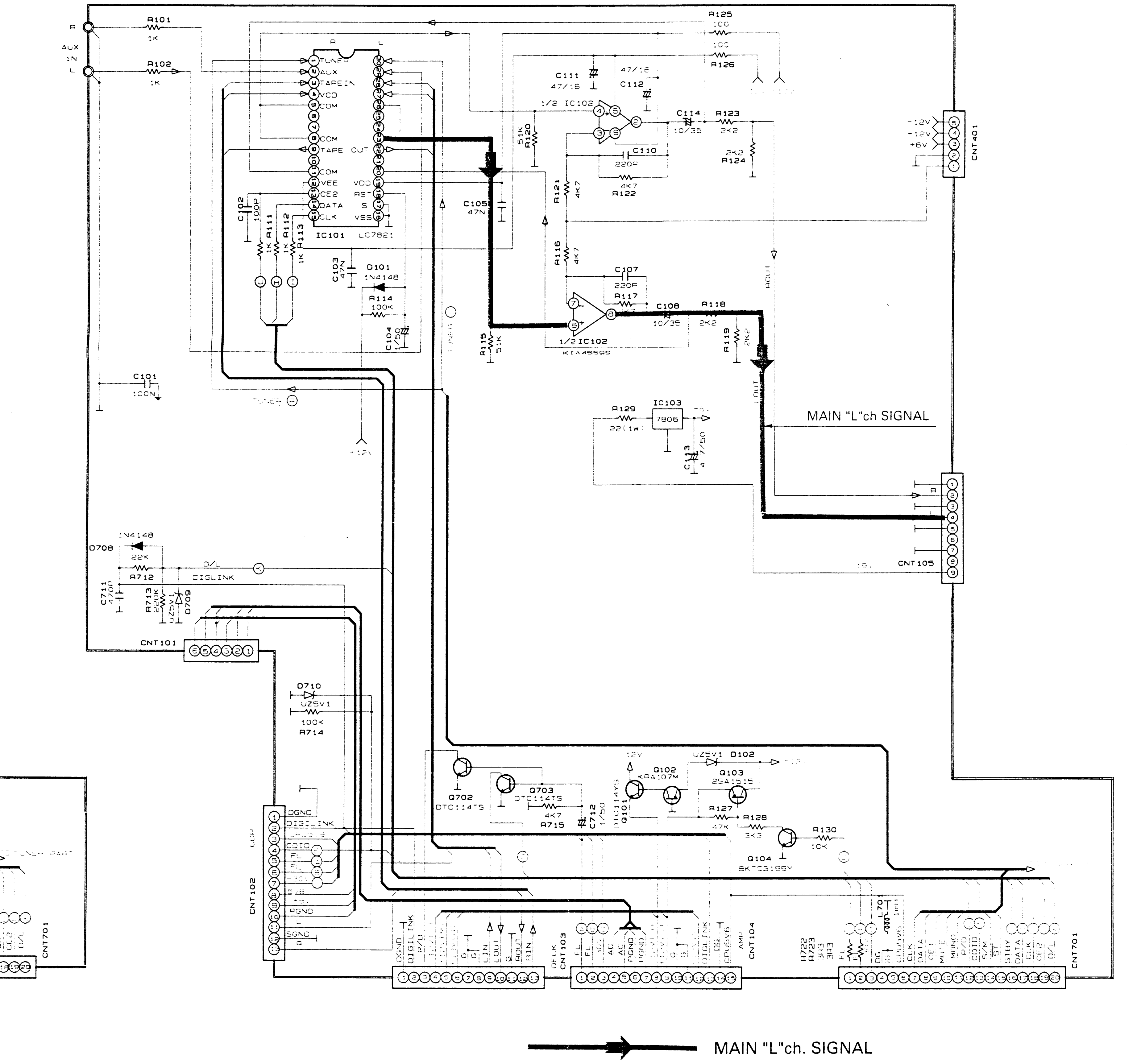

7
8
9
C702 47N
C703 47N
FL
D701 1N4148
D702 1N4148
D703 1N4148
D704 1N4148
D705 1N4148
SLEEP
SURROUND MODE
CLOCK
MEMORY SET
CENTER MODE
TIMER
TUNING
FM MODE
AUDIO
IC701
CNT703
VFDP
VCC
VFD
R701 100K
R702 100K
P/C
X701 10MHz
C707
C708
C709
R709
R710
R711
C714
R705 100K
R704 100K
R703 100K
C704 47/16
C705 47mF
D/PT
A/KS
C706
R706 100K
D706 1N4148
R707 10K
C710 10/16
R708 10K
Q701
D707 1N4148
C713
L702
CNT701

PIN CONNECTION DIAGRA


ZENER
IN4148
Anode
Cathode
SVC32
SVC21
KIA4559S/KIA75559S
LA7952
1
9

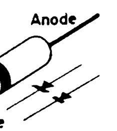
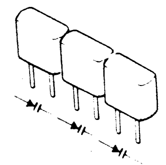
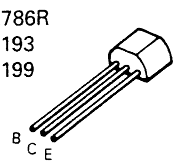
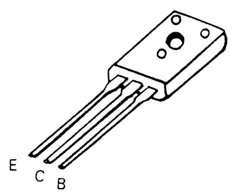
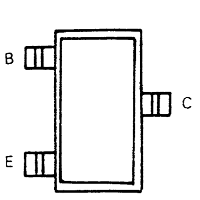
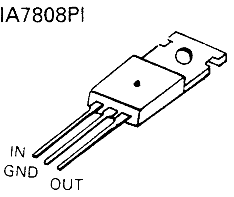
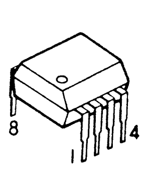
G H I J K L

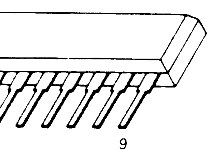
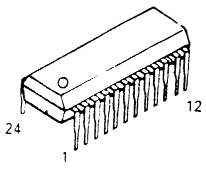
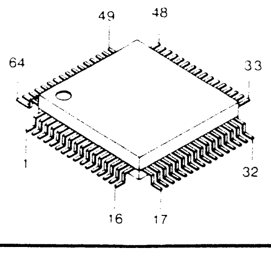
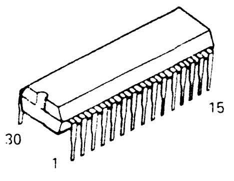
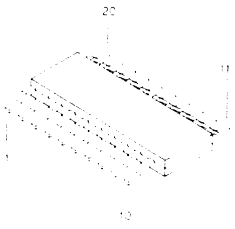
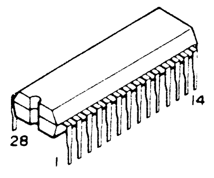
MAIN(PCB1) (※KS, PT INDO VERSION)


AUX IN
R
L
R101 1K
R102 1K
R125 100
R126 100
IC101 LC7821
TUNER
AUX
TAPE IN
VCD
COM
TAPE OUT
VEE
VDD
CE2
RST
DATA
S
CLK
VSS
C102 100P
R111 1K
R112 1K
R113 1K
C103 47N
D101 1N4148
R114 100K
C104 1/50
C101 100N
C105 47N
C111 47/16
C112 47/16
1/2 IC102
C114 10/35
R123 2K2
R124 2K2
C110 220P
R122 4K7
R120 51K
R121 4K7
R116 4K7
C107 220P
R117 4K7
C108 10/35
R118 2K2
R119 2K2
R115 51K
1/2 IC102
KIA4558S
IC103 7806
R129 22(1W)
C113 47/50
+12V
+6V
CNT401
MAIN "L"ch SIGNAL
CNT105
D708 1N4148
R712 22K
C711 470P
R713 220K
D709 UZ5V1
D/L
DIGILINK
CNT101
D710 UZ5V1
R714 100K
Q702 DTC114TS
Q703 DTC114TS
R715 4K7
C712 1/50
Q101 DTC114YS
Q102 KRA107M
D102 UZ5V1
Q103 2SA1515
R127 47K
R128 3K3
R130 10K
Q104 BKTC3199Y
CNT102
DGND
DIGILINK
CDIO
FL
PGND
SGND
CNT103
CNT104
CNT701
R722 R723
L701
DATA
CLK
CE1
MUTE
MONO
STBY
CE2
D/L

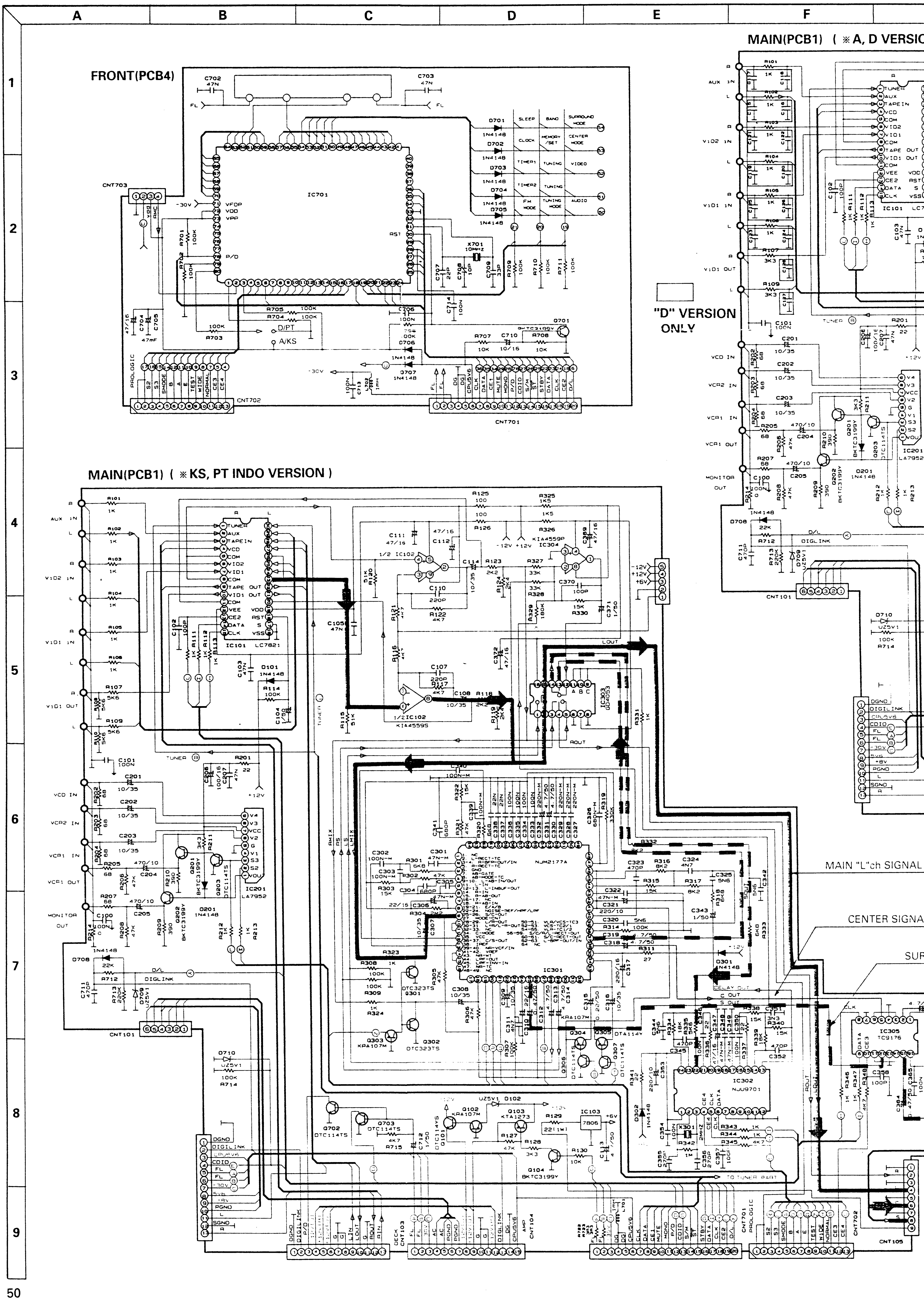
MAIN "L"ch. SIGNAL

NECTION DIAGRAM DIODES, TRANSISTORS AND ICS

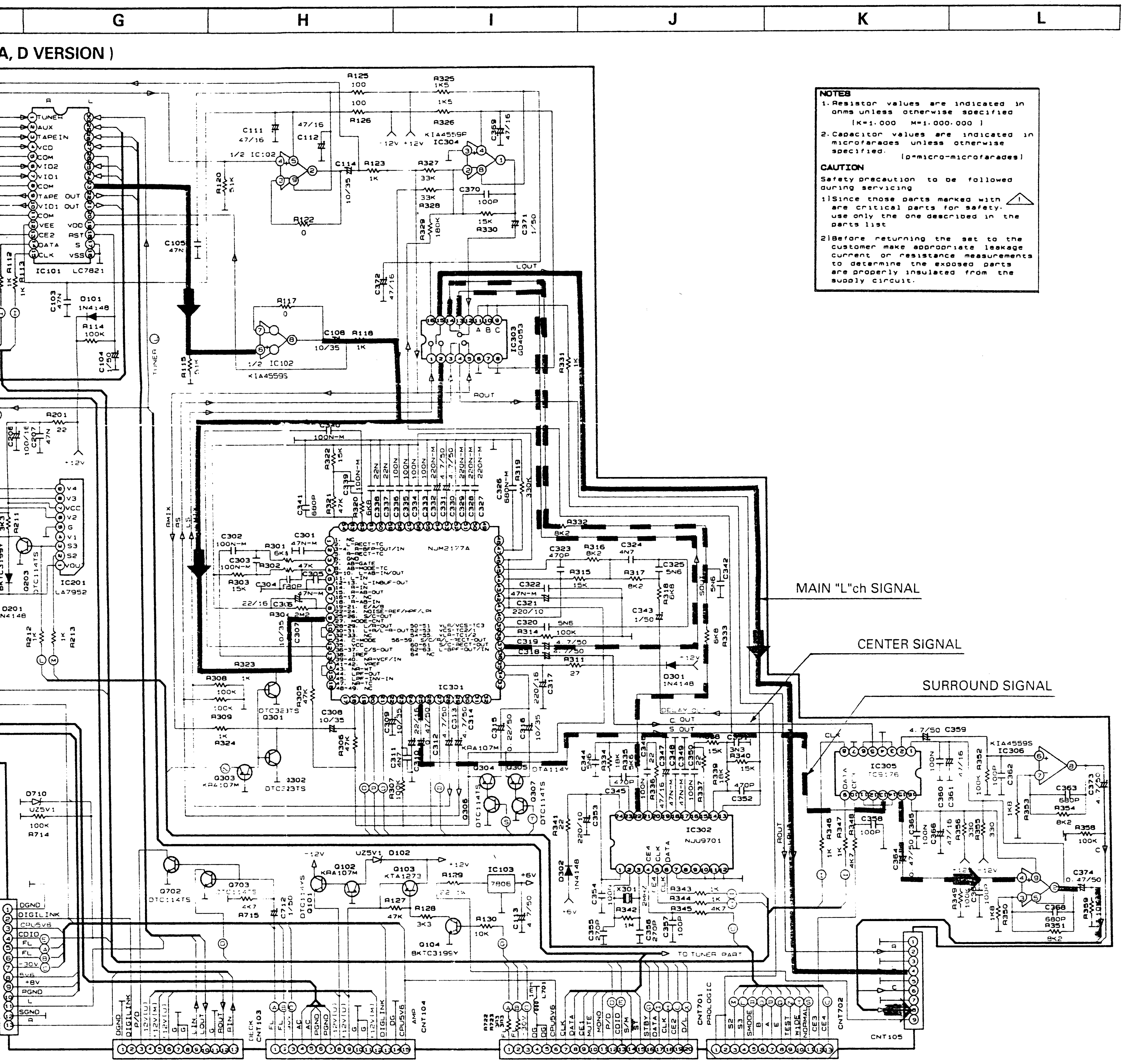
	SVC321 SPA-C SVC211 SPA-C 	DTC114YS DTC114TS DTC323TS KSC2786R KTC3193 KTC3199 	KTA1273 	KTC3880 	KIA7805PZ KI7806PI KIA7808PI 	KIA4559P/KIA7555P 

KIA75559S 	LA1266 NJU9701 	NJM2177AFB3  49 48 64 33 1 32 16 17	LC7821 	LM7001M 	ES56028 

SCHEMATIC DIAGRAM II


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
FRONT(PCB4)
MAIN(PCB1) (※A, D VERSIC
"D" VERSION ONLY
MAIN(PCB1) (※KS, PT INDO VERSION)
IC701
CNT703
CNT702
CNT701
IC101 LC7821
IC201 LA7952
IC304 KIA4559P
1/2 IC102
IC303 GD4053
IC301 NJM2177A
IC302 NJU9701
IC305 TC9176
IC103 7806
CNT101
CNT103
CNT104
CNT105
LOUT
ROUT
DELAY OUT
S OUT
TO TUNER PART
MAIN "L"ch SIGNAL
CENTER SIGNA
SUR

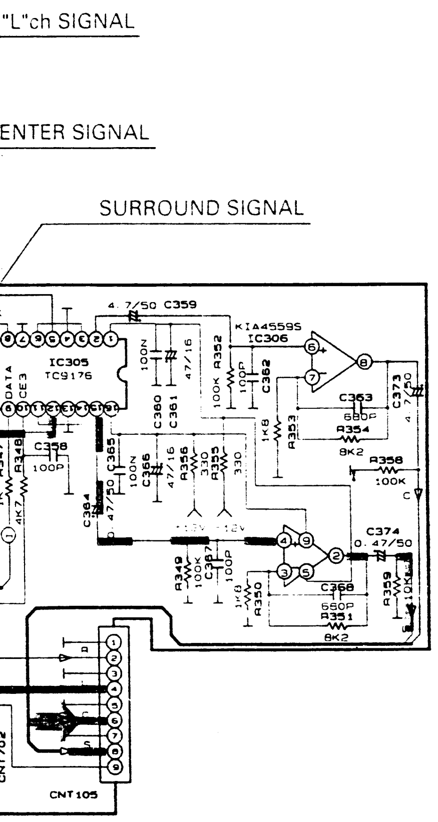
A, D VERSION)


G
H
I
J
K
L
IC101 LC7821
1/2 IC102
KIA4559S
IC304 KIA4558P
IC303 GD4053
IC301 NJM2177A
IC302 NJU9701
IC103 7806
IC305 TC9176
IC306 KIA4559S
IC201 LA7952
LOUT
ROUT
TUNER
MAIN "L"ch SIGNAL
CENTER SIGNAL
SURROUND SIGNAL
TO TUNER PART
CNT104
CNT105
CNT701 PROLOGIC
CNT702
D301 1N4148
D302 1N4148
Q301 DTC323TS
Q302 DTC223TS
Q303 KRA107M
Q102 KRA107M
Q103 KTA1273
Q104 BKTC3199Y
Q702 DTC114TS
X301

NOTES
1. Resistor values are indicated in ohms unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitor values are indicated in microfarades unless otherwise specified. (p=micro-microfarades)

CAUTION

Safety precaution to be followed during servicing
1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list.
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.


"L"ch SIGNAL
ENTER SIGNAL
SURROUND SIGNAL
IC305 TC9176
IC306 KIA4559S
CNT105

━━➡━━ MAIN "L"ch. SIGNAL

CENTER SIGNAL

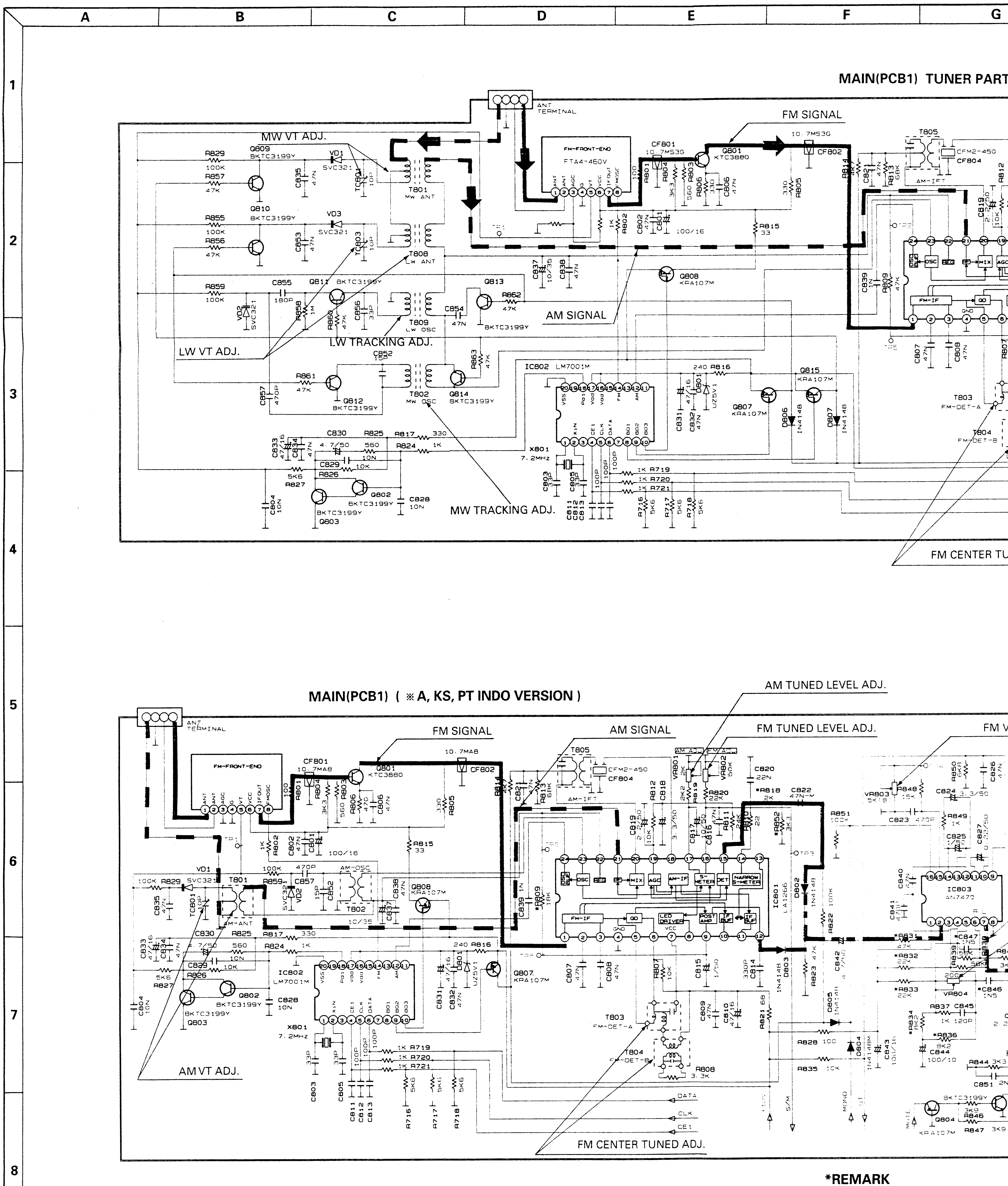
━ ➡ ━ ━ SURROUND SIGNAL

NOTES
1. Resistor values are indicated in ohms unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitor values are indicated in microfarades unless otherwise specified. (p=micro-microfarades)

CAUTION

Safety precaution to be followed during servicing
1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list.
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

SCHEMATIC DIAGRAM III


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
MAIN(PCB1) TUNER PART
ANT TERMINAL
FM SIGNAL
AM SIGNAL
MW VT ADJ.
LW VT ADJ.
LW TRACKING ADJ.
MW TRACKING ADJ.
FM CENTER TU
FM-FRONT-END
FTA4-460V
CF801
CF802
CF804
Q801 KTC3880
T801 MW ANT
T808 LW ANT
T809 LW OSC
T802 MW OSC
T805 AM-IFT
T803 FM-DET-A
T804 FM-DET-B
IC802 LM7001M
X801 7.2MHz
Q808 KRA107M
Q807 KRA107M
Q815 KRA107M
Q809 BKTC3199Y
Q810 BKTC3199Y
Q811 BKTC3199Y
Q812 BKTC3199Y
Q813 BKTC3199Y
Q814 BKTC3199Y
Q802 BKTC3199Y
Q803 BKTC3199Y
MAIN(PCB1) (※A, KS, PT INDO VERSION)
AM TUNED LEVEL ADJ.
FM TUNED LEVEL ADJ.
AM VT ADJ.
FM CENTER TUNED ADJ.
IC801 LA1266
IC803 AN7470
VR801
VR802
VR803
VR804
Q804 KRA107M
DATA
CLK
CE1
S/M
MONO
MUTE

*REMARK

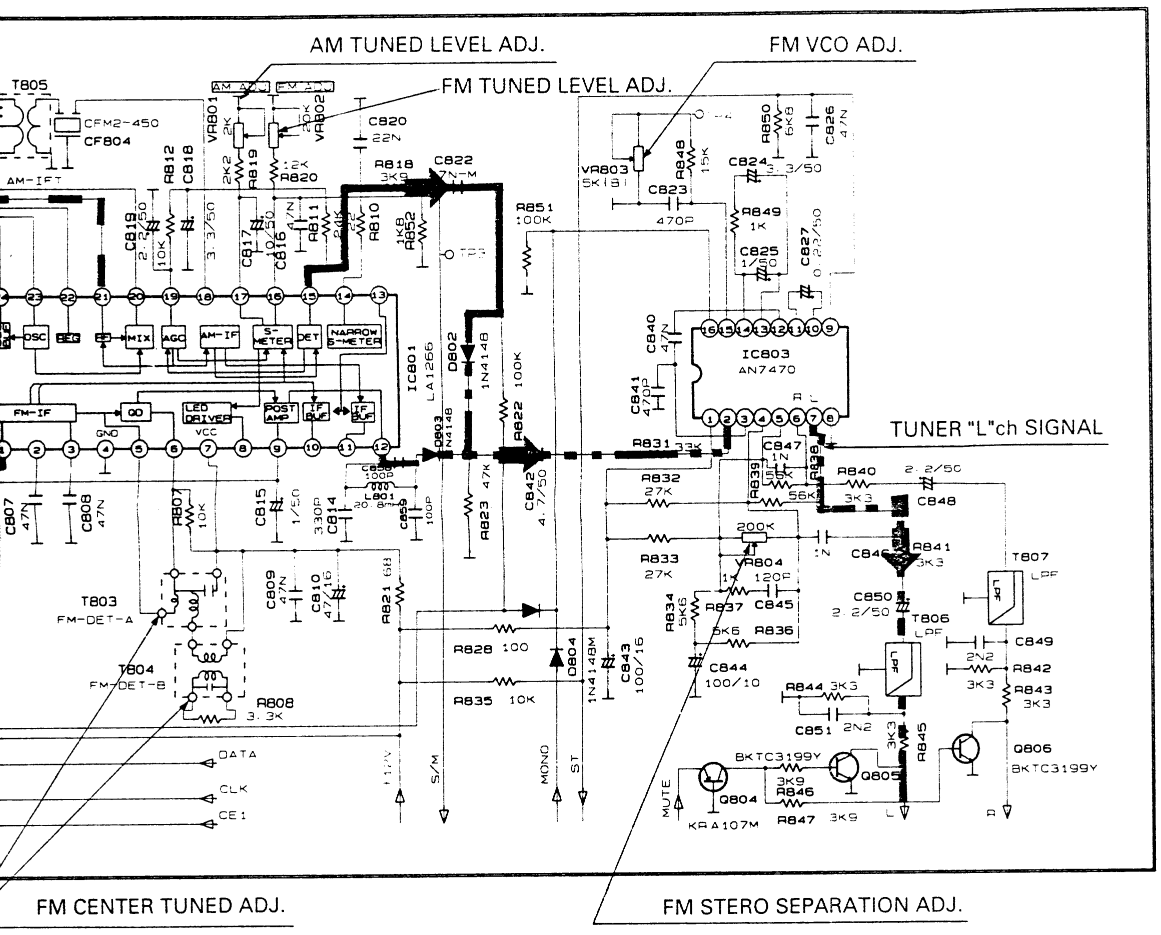
	R818	R852	R809	R84 R84
KS. A	2K	3K3	18K	10K
PT	3K9	1K8	47K	3K

FM SIGNAL

AM SIGNAL

TUNER "L"ch. SIGNAL

) TUNER PART D VERSION


AM TUNED LEVEL ADJ.
FM VCO ADJ.
FM TUNED LEVEL ADJ.
IC801 LA1266
IC803 AN7470
TUNER "L"ch SIGNAL
T803 FM-DET-A
T804 FM-DET-B
T806 LPF
T807 LPF
VR803
VR804
DATA
CLK
CE1
S/M
MONO
ST
MUTE
Q804 KRA107M
Q805
Q806 BKTC3199Y
FM CENTER TUNED ADJ.
FM STERO SEPARATION ADJ.

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
   (K=1.000 M=1.000.000)
2. Capacitor values are indicated in microfarades unless otherwise specified. (p=micro-microfarades)

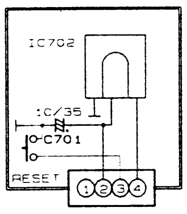
CAUTION

Safety precaution to be followed during servicing

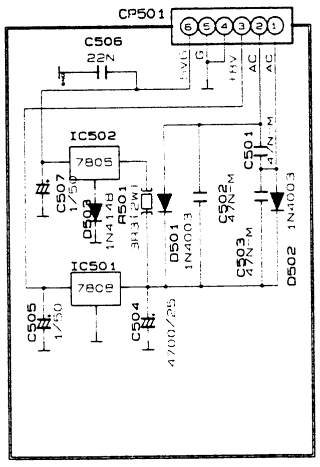
1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list

2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

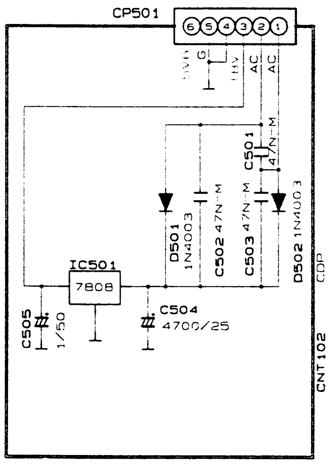
RMC(PCB5)

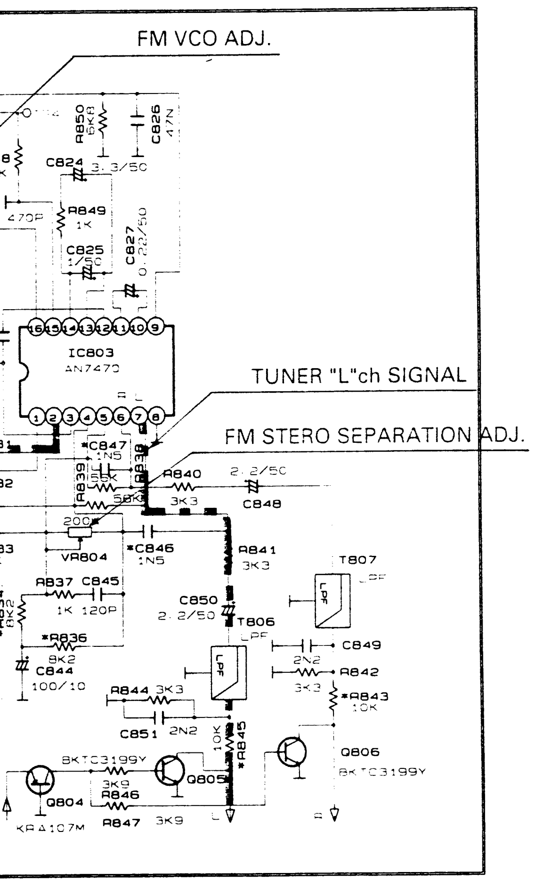

IC702
C701
RESET

POWER(PCB3)
(※KS, PT INDO VERSION)


CP501
C506 22N
IC502 7805
IC501 7808
D501 1N4003
D502 1N4003
C501 47N-M
C502 47N-M
C503 47N-M
C504 4700/25
C505 1/50
C507 1/50

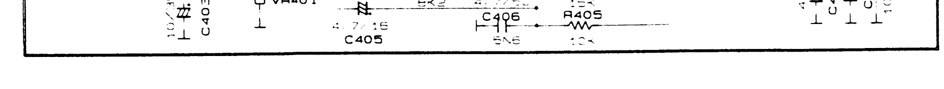
POWER(PCB3)
(※ A/D VERSION)


CP501
IC501 7808
D501 1N4003
D502 1N4003
C501 47N-M
C502 47N-M
C503 47N-M
C504 4700/25
C505 1/50
CNT102

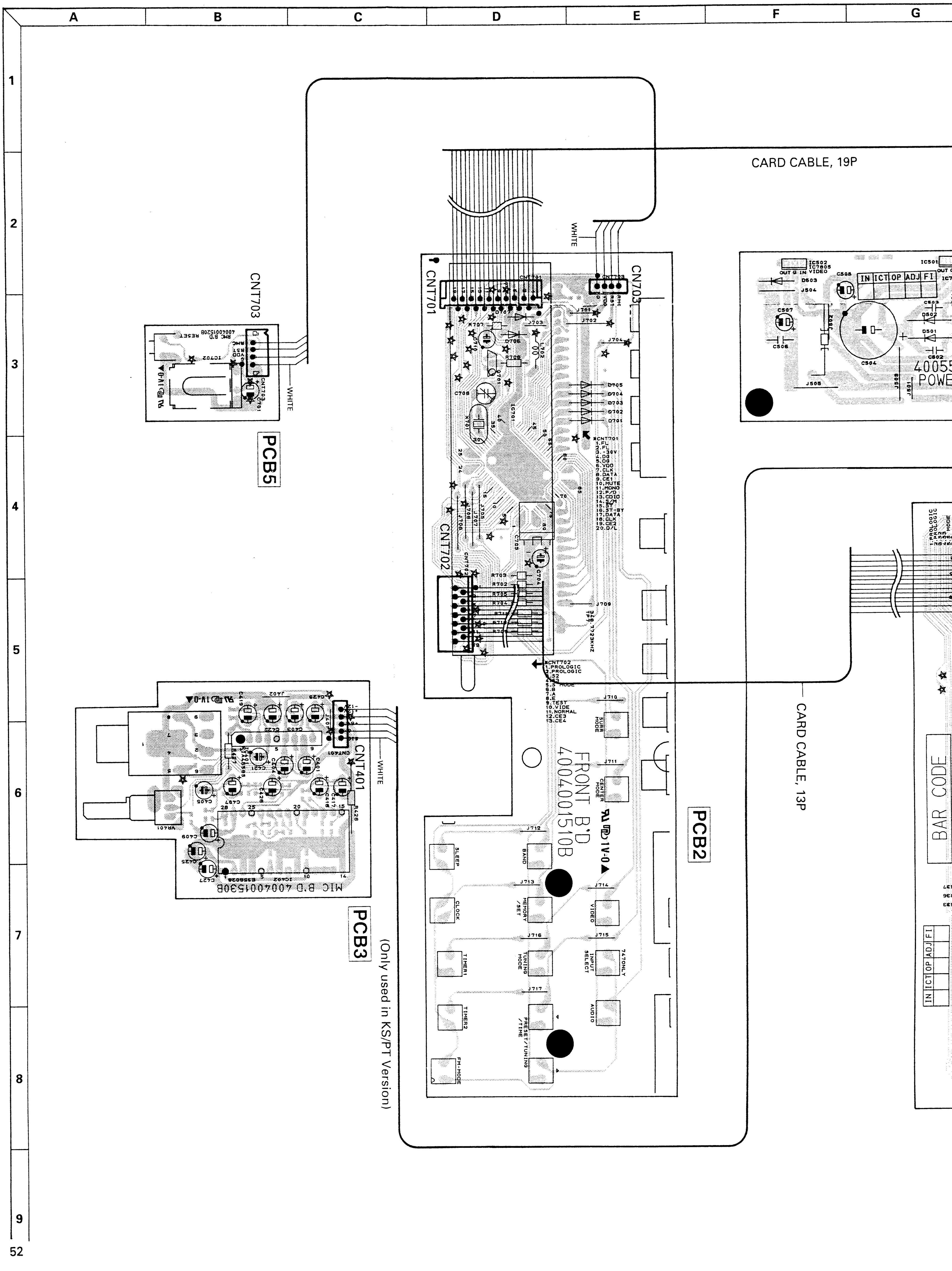

FM VCO ADJ.
IC803 AN7470
TUNER "L"ch SIGNAL
FM STERO SEPARATION ADJ.
VR804
T806 LPF
T807 LPF
Q804 KRA107M
Q805
Q806 BKTC3199Y

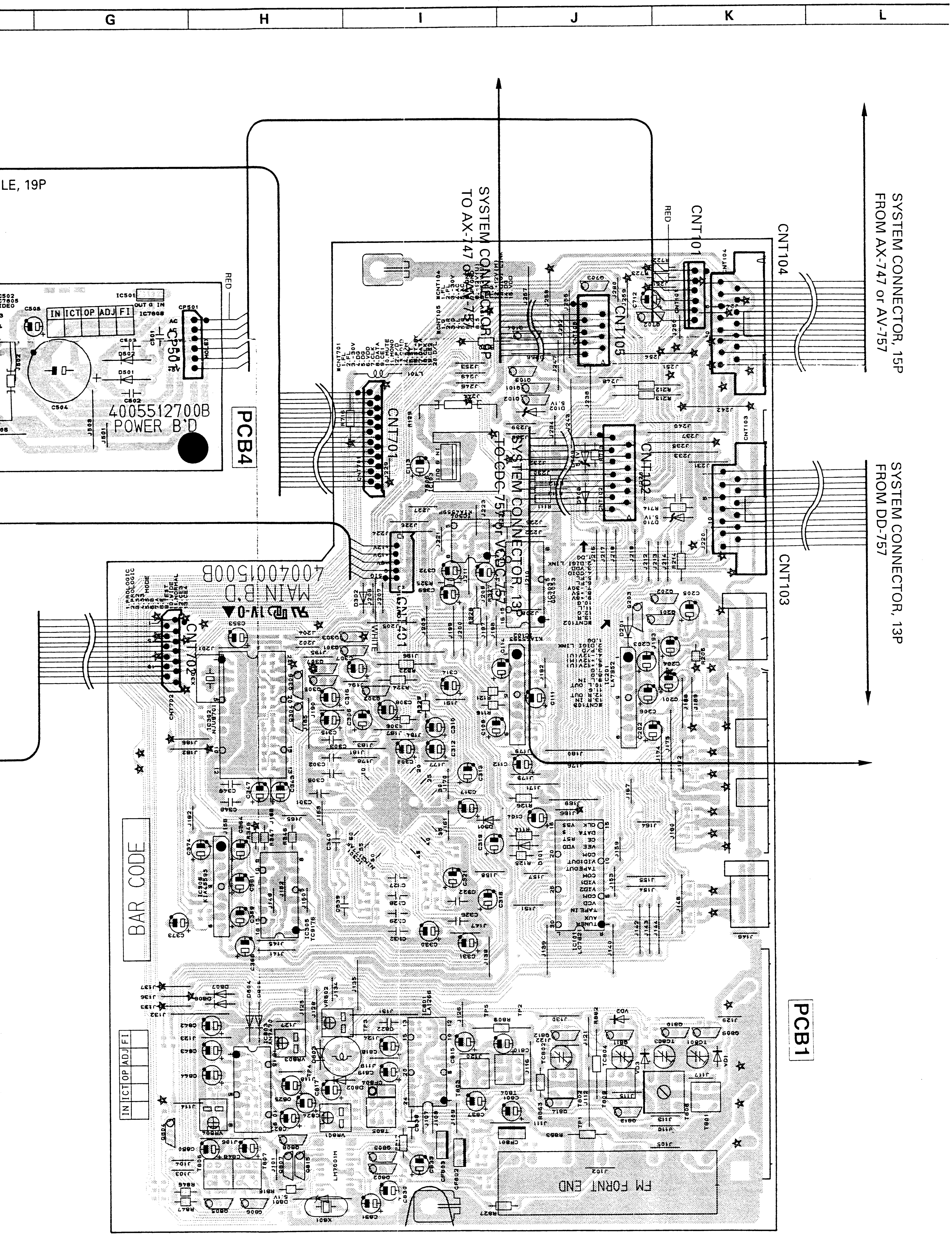
R852	R809	R843 R845	R832 R833	R834 R836	R831	C846 C847
3K3	18K	10K	22K	8K2	47K	1N5
1K8	47K	3K3	27K	5K6	33K	1N

MIC(PCB2) (※KS, PT INDO VERSION ONLY)


CNT401
IC401 KIA4559S
IC402
MICOUT
12V
VR401

WIRING DIAGRAM


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
CARD CABLE, 19P
CARD CABLE, 13P
WHITE
CNT703
CNT701
CNT702
CNT401
PCB5
PCB2
PCB3
RMC B'D 4004001520B
MIC B'D 4004001530B
FRONT B'D
4004001510B
(Only used in KS/PT Version)
SUR MODE
CENTER MODE
SLEEP
BAND
CLOCK
MEMORY /SET
VIDEO
TIMER1
TUNING MODE
INPUT SELECT
TIMER2
PRESET/TUNING /TIME
AUDIO
FM-MODE
IN ICT OP ADJ FI
POWER
BAR CODE
CNT701
1.FL
2.FL
3.-30V
4.DO
5.DO
6.VDD
7.CLK
8.DATA
9.CE1
10.MUTE
11.MONO
12.P/O
13.CDIO
14.S/M
15.ST
16.ST-BY
17.DATA
18.CLK
19.CE2
20.D/L
CNT702
1.PROLOGIC
2.PROLOGIC
3.S2
4.S3
5.MODE
6.B
7.A
8.E
9.TEST
10.VIDE
11.NORMAL
12.CE3
13.CE4


G
H
I
J
K
L
LE, 19P
SYSTEM CONNECTOR, 15P
FROM AX-747 or AV-757
SYSTEM CONNECTOR, 13P
FROM DD-757
SYSTEM CONNECTOR 9P
TO AX-747 or AV-757
SYSTEM CONNECTOR 13P
TO CDC-757 or VCDC-757
CNT101
CNT102
CNT103
CNT104
CNT105
CNT401
CNT701
CNT702
CP501
RED
WHITE
IN ICT OP ADJ FI
4005512700B
POWER B'D
PCB4
4004001500B
MAIN B'D
PCB1
BAR CODE
FM FORNT END

▪ VCDC-757/CDC-757 ▪

SPECIFICATIONS

GENERAL

Transmission bit ratio	4.3218 Mbit/sec
Transmission on clock	16.9344 MHz
Error correction	CIRC C1: Double correction C2: Quadruple correction

PICK-UP

System object lens type	Optical pick-up
Object lens drive system	2 Dimensional parallel drive type
Optical source	Semiconductor laser
Wave length	780 nm
Tracking system	3 Beam tracking servo type

OTHER

D/A Converter	1 bit twin with digital filter

ELECTRICAL

- Measuring methods in confirmity with EIAJ CP-307, CCIR 468-3
- Reference level: 0 dB
- Test disc: SONY CD-3 YEDS-7, A,BEX TCD725
- Filter: 30 kHz, 18 dB/oct low pass filter

Description		Track	Nominal	Limit
Frequency Response at 20 Hz - 20 kHz		2 - 13	±1.0 dB	±2.0 dB
Signal to Noise Ratio at 1 kHz (Weighted A)		23	75 dB	70 dB
Dynamic Range at 1 kHz, 60 dB (Weighted A)		20	75 dB	70 dB
Total Harmonic Distortion at 0 dB	100 Hz	4	0.06%	0.1%
	1 kHz	7	0.06%	0.1%
	20 kHz	13	0.08%	0.1%
Channel Separation at 1 kHz (Selective)		30, 34	55 dB	50 dB
Channel Unbalance at 1 kHz		7	±1.0 dB	±2.0 dB
Access Time (Track to next track)			7 sec	9 sec
Disc Defects	Black dot	10 - 15	700 uM	700 uM
	Interrupt	3 - 9	800 uM	800 uM
	Fingerprint	17 - 19	ALL	ALL
De-emphasis		39	±0.2 dB	±0.3 dB
		40	±0.3 dB	±0.5 dB
		41	±0.5 dB	±1.0 dB

ENVIRONMETAL

Test to specification

Temperature between 59°F (15℃) and 95°F (35℃) and relative humidity between 45% and 75%, with power supply voltage of 10% the normal supply voltage.
Test disc: SONY.YEDS-7 or ABEX TCD784, TCD725.

Operation

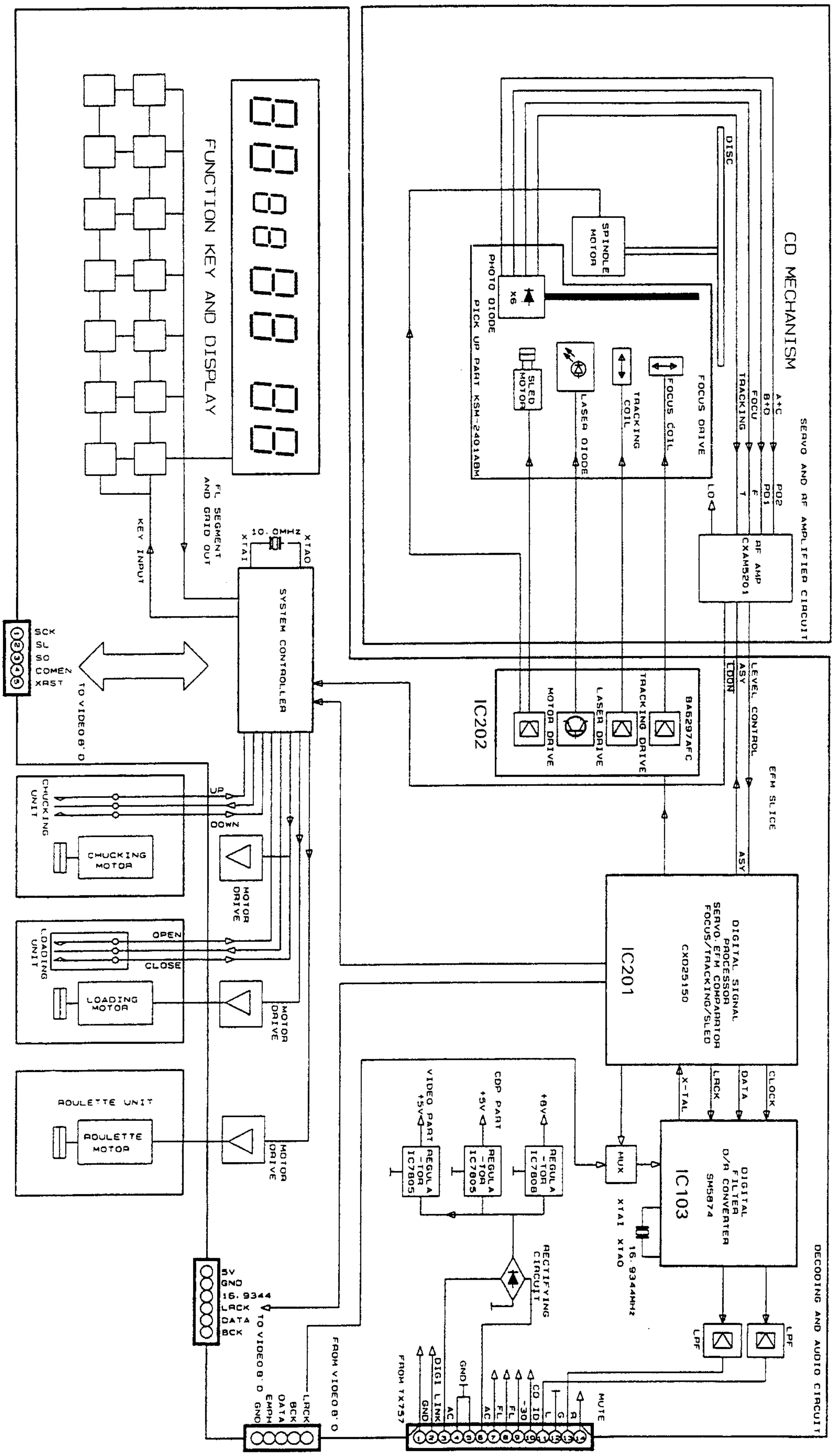
Unit must work properly and correctly at the temperature range from 32°F (0℃)to 113°F (45℃) and the relative humidity from 40% to 80%, and with the supply voltage.

Storage

Temperature test: 48 hours each at -40°F (-40℃) and 149°F (65℃).
Humidity test: 40℃ 95% relative humidity.

BLOCK DIAGRAM I

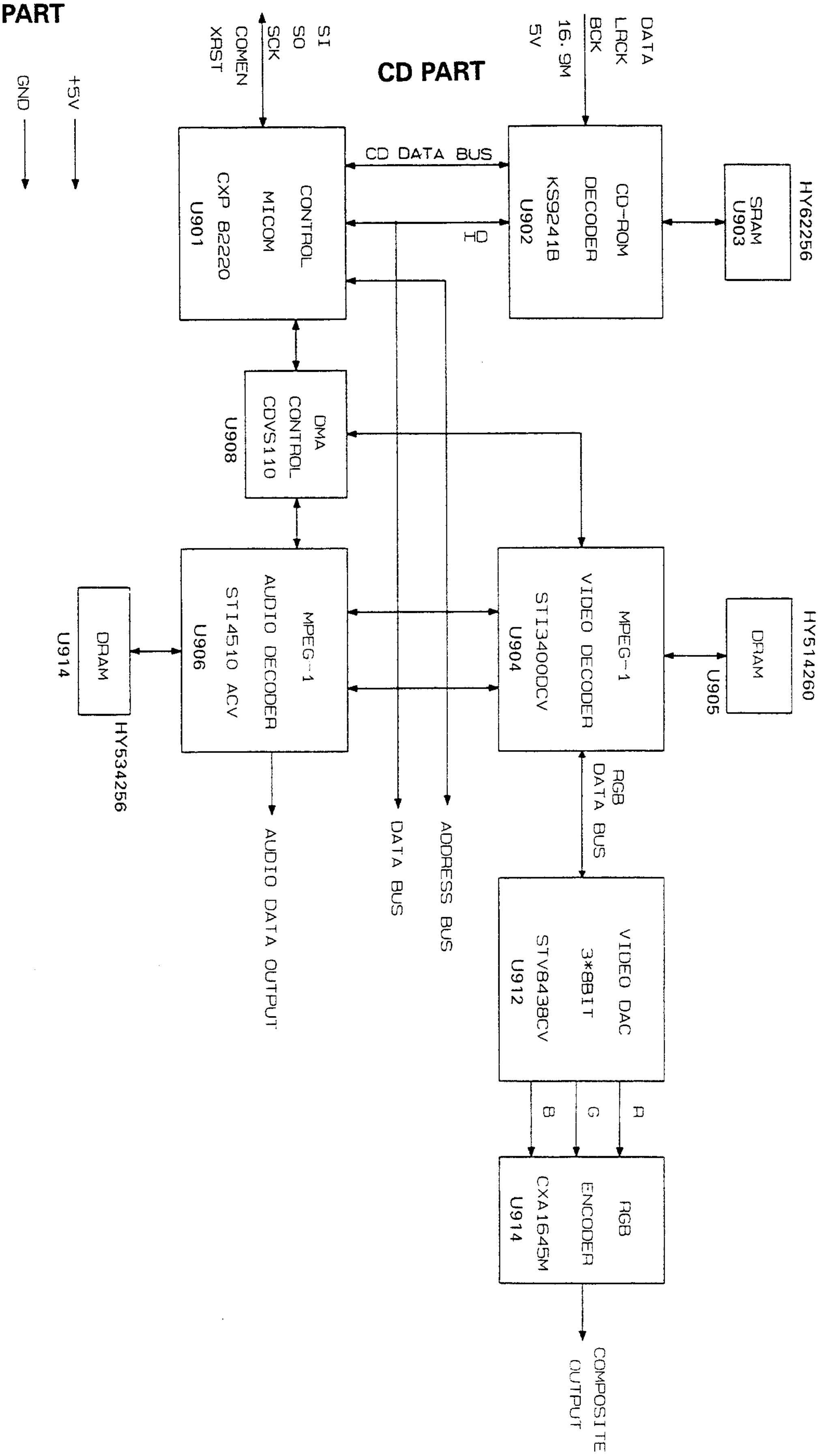
Model No : CDC-757/VCDC-757


CD MECHANISM
DISC
SPINDLE MOTOR
PHOTO DIODE
X6
PICK UP PART KSM-2401ABM
SLED MOTOR
LASER DIODE
TRACKING COIL
FOCUS COIL
FOCUS DRIVE
SERVO AND RF AMPLIFIER CIRCUIT
A+C
B+D
FOCU
TRACKING
PD2
PD1
F
T
LD
RF AMP
CXA1520I
LEVEL CONTROL
ASY
LDON
EFM SLICE
ASY
BA6297AFC
TRACKING DRIVE
LASER DRIVE
MOTOR DRIVE
IC202
FUNCTION KEY AND DISPLAY
FL SEGMENT AND GRID OUT
KEY INPUT
10.0MHZ
XTAI
XTAO
SYSTEM CONTROLLER
SCK
SL
SO
COMEN
XRST
TO VIDEO B'D
CHUCKING UNIT
CHUCKING MOTOR
UP
DOWN
MOTOR DRIVE
LOADING UNIT
LOADING MOTOR
OPEN
CLOSE
MOTOR DRIVE
ROULETTE UNIT
ROULETTE MOTOR
MOTOR DRIVE
DIGITAL SIGNAL PROCESSOR
SERVO EFM COMPARATOR
FOCUS/TRACKING/SLED
CXD2515Q
IC201
X-TAL
LRCK
DATA
CLOCK
MUX
DIGITAL FILTER
D/A CONVERTER
SM5874
IC103
XTAI
XTAO
16.9344MHz
LPF
LPF
DECODING AND AUDIO CIRCUIT
VIDEO PART +5V
CDP PART +5V
+8V
REGULATOR IC7805
REGULATOR IC7805
REGULATOR IC7808
RECTIFYING CIRCUIT
5V
GND
16.9344
LRCK
DATA
BCK
TO VIDEO B'D
FROM VIDEO B'D
LRCK
BCK
DATA
EMPH
GND
FROM TX757
GND
DIGI LINK
AC
GND
AC
FL
FL
-30
CD ID
L
G
R
MUTE
1
2
3
4
5
6
7
8
9
10
11
12
13
14

BLOCK DIAGRAM II

Model No. : VCDC-757

MPEG PART


CD PART
+5V
GND
SI
SO
SCK
COMEN
XRST
DATA
LRCK
BCK
16. 9M
5V
CONTROL
MICOM
CXP 82220
U901
CD DATA BUS
HD
CD-ROM
DECODER
KS9241B
U902
HY62256
SRAM
U903
DMA
CONTROL
CDVS110
U908
MPEG-1
AUDIO DECODER
STI4510 ACV
U906
DRAM
U914
HY534256
MPEG-1
VIDEO DECODER
STI3400DCV
U904
DRAM
U905
HY514260
AUDIO DATA OUTPUT
DATA BUS
ADDRESS BUS
RGB
DATA BUS
VIDEO DAC
3*8BIT
STV8438CV
U912
R
G
B
RGB
ENCODER
CXA1645M
U914
COMPOSITE
OUTPUT

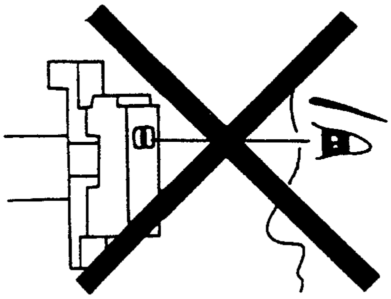
LASER BEAM SATETY PTECATIONS

CLASS 1 LASER PRODUCT

CLASS 1
LASER PRODUCT

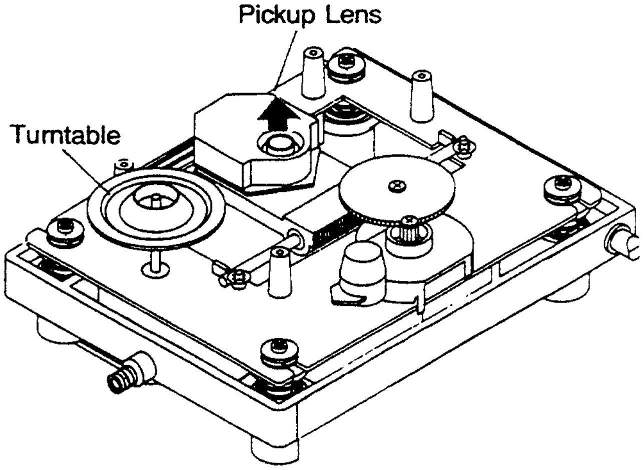
CAUTION
Invisible laser radiation when the unit is open. DO not stare into beam.

CAUTION: USE OF ANY CONTROLS, ADJUSTMENT, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



Do not look directly at the laser beam coming from the pickup or allow it to strike against your skin.

This compact disc player uses a pickup that emits a laser beam. The laser beam is emitted from the location shown in the figure. When checking the laser diode, be sure to keep your eyes at least 1 foot away from the pickup lens when the diode is turned on. Do not look directly at the laser beam.



CAUTION:
Using controls and adjustment, or doing procedures other than those specified herein, may result in hazardous radiation exposure.

SAFETY PRECAUTIONS

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Attention: Pour prévenir les chocs électriques ne pas utiliser cetre fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames prévent étre insérées à fond sans en laisser aucune partie à découvert.

HANDLING LASER PICKUP

The laser diode in the optical system of this player can be damaged by electrostatic discharge from your clothes or your body. Proper electrostatic grounding for service personal is required during servicing.

BEFORE REPAIRING THE COMPACT DISC PLAYER

Preparation

- Human Body Grounding:
  Many of the components used in this compact disc player, including the laser pickup, are sensitive to electrostatic discharge. Service personal should be grounded with an electrostatic armband (1 Mohm).

- Caution:
  Static charge on clothing does not escape through a body grounding wrist band.
  Be careful not to contact the pickup or electrical components with your clothing.

- Workbench and Tool Grounding:
  A properly-grounded electroconductive plate (1 Mohm) or metal sheet should be fitted to the workbench surface. Tools and instruments (such as soldering irons and scopes) should be grounded to prevent AC leakage.

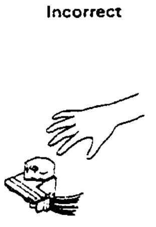


Fig. 1

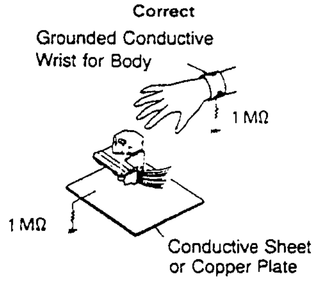


Fig. 2

Note: Laser diodes are so susceptible to damage from static electricity that, even if a static discharge does not ruin a diode, it can shorten its life or cause it to work improperly.

PICKUP REPLACEMENT

Caution:
Laser diodes are extremely susceptible to damage from static electricity. Even if a static discharge does not ruin the diode, it can shorten its life or cause it to work improperly. When replacing the pickup, take appropriate measures, such as using a conductive mat and a grounded soldering iron, to protect the laser diode from static damage.

1. Remove the CD mechanism assembly by referring to the "EXPLODED VIEW II" on page 72 (See Fig. 3).

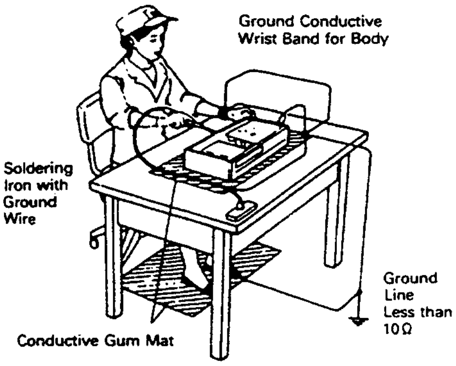

Ground Conductive Wrist Band for Body
Soldering Iron with Ground Wire
Ground Line Less than 10Ω
Conductive Gum Mat

Fig. 3

2. Remove four screws S12 (See Fig. 4).

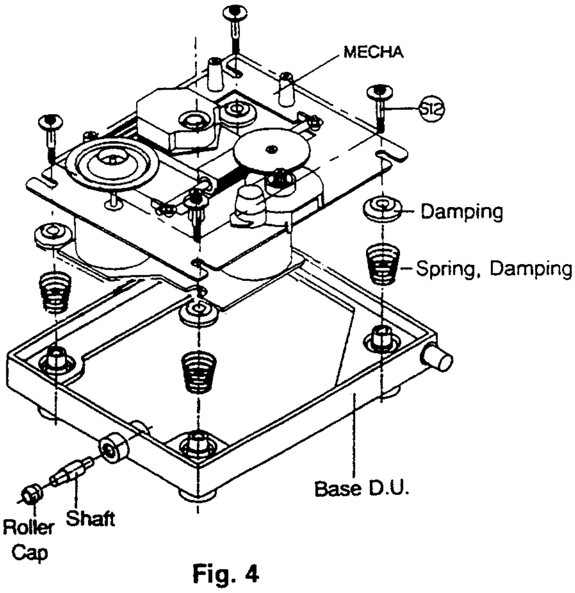

MECHA
S12
Damping
Spring, Damping
Base D.U.
Roller Cap
Shaft

Fig. 4

3. Remove the gear A (See Fig. 5).
4. Pull out the slide shaft.

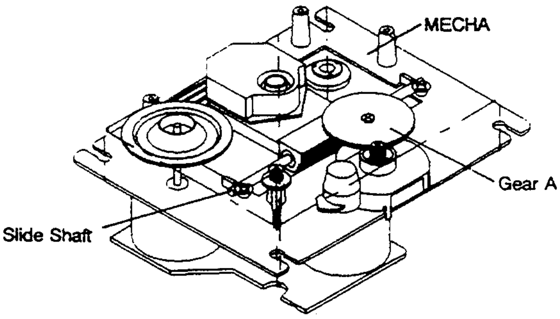

MECHA
Gear A
Slide Shaft

Fig. 5

5. Remove the pickup (See Fig. 6).

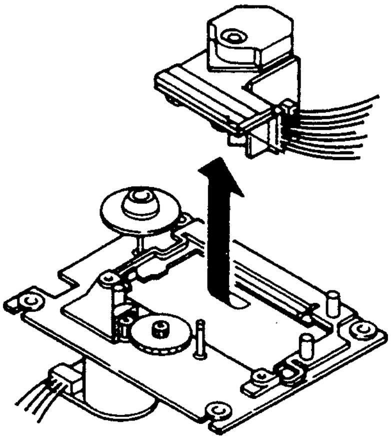


Fig. 6

6. Refer to the EXPLODED VIEW II of the compact disc mechanism on page 72 for detailed illustrations.

OPERATION CHECK

When the power switch is turned on after the chucking arm is removed, observe the objective lens and check the following. (The optical system block should be at the lead-in position when it is checked.)

1. The disc table should be at the innermost position after the chucking arm is removed.
2. The diffused light of the laser beam can be seen when the power switch is turned on.
3. Vertical (up and down) movement of the objective lens takes place (2 or 3 times).

DISASSEMBLY PROCEDURES

REFER TO PAGES 71 AND 82.

1 COVER TOP REMOVAL

Remove 5 screws ⓐ and then remove the Cover Top ❼.

2 FRONT PANEL ASSEMBLY REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1
2. Remove 8 screws ⓑ.
3. Disconnect (CP401) from Front1 P.C.Board (PCB4) and then remove the Front Panel Assembly AA.

3 FRONT1, 2 P.C.BOARD (PCB4, PCB5) REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Remove the Front Panel Assembly AA, referring to the previous step 2.
3. Remove 6 screws ⓒ and then remove the Front1, 2 P.C.Board (PCB4, PCB5).

4 ASSEMBLY MECHANISM REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Remove the Front Panel Assembly AA, referring to the previous step 2.
3. Remove 4 screws ⓓ.
4. Disconnect (CP301) from CNT P.C.Board (PCB3) and then remove the Assembly Mechanism ⓫.

5 DSP P.C.BOARD (PCB2) REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Do steps 2 and 4.
3. Remove the card cable from wafer (CP203 and CP202) on the DSP P.C.Board (PCB2)
4. Disconnect (CP201) from the DSP P.C.Board (PCB2).
5. Remove 3 screws ⓔ and then remove the DSP P.C.Board (PCB2).

6 MAIN P.C.BOARD (PCB1) REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Do steps 2 and 4.
3. Remove 3 screws ⓕ and then remove the 2 taps (attached to the Main P.C.Board) from the body mechanism.
4. Remove the card cable from wafer (CP109) on the Main P.C.Board (PCB1).
5. Disconnect (CP102, CP101, CN106 and CP103) from the Main P.C.Board (PCB1).
6. Disconnect (CP901, CP902, CP903 and CP904) from the MPEG P.C.Board (PCB7). (This step is applicable for only VCDC757)

7 MPEG P.C.BOARD (PCB7) REMOVAL

(This step is applicable for only VCDC757)

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Do steps 2 and 4.
3. Disconnect (CP901, CP902, CP903 and CP904) from the MPEG P.C.Board (PCB7)
4. Remove 3 screws ⓖ and then remove the MPEG P.C.Board (PCB7).

8 VIDEO JACK P.C.BOARD (PCB6) REMOVAL

(This step is applicable for only VCDC757)

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Disconnect (CP601) from the MPEG P.C.Board (PCB7).
3. Remove a screw ⓗ and then remove the Video Jack P.C.Board (PCB6).

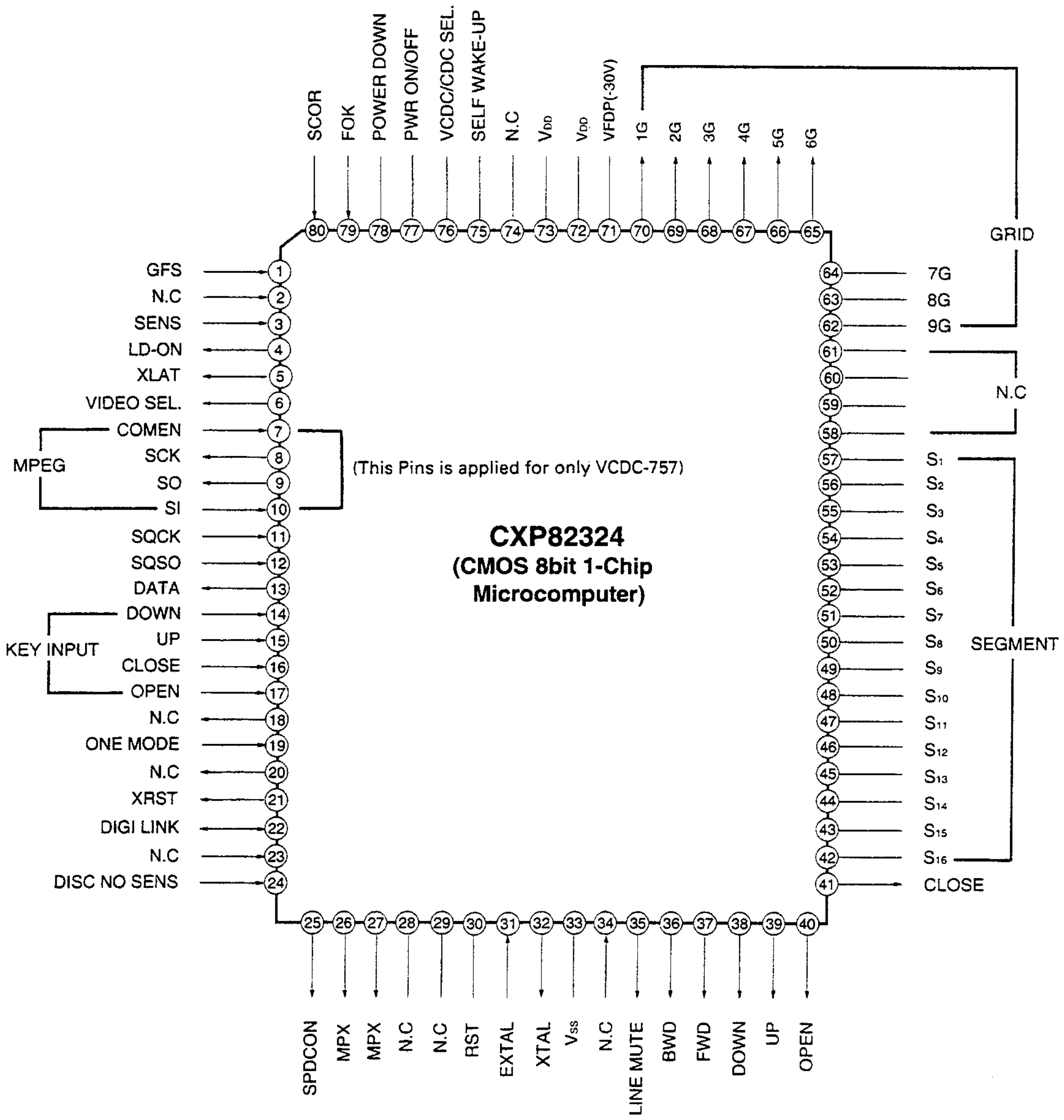
9 CNT P.C.BOARD (PCB3) REMOVAL

1. Remove the Cover Top ❼, referring to the previous step 1.
2. Disconnect (CP301) from the CNT P.C.Board (PCB3).
3. Remove 2 screws ⓘ and then remove the CNT P.C.Board (PCB3).

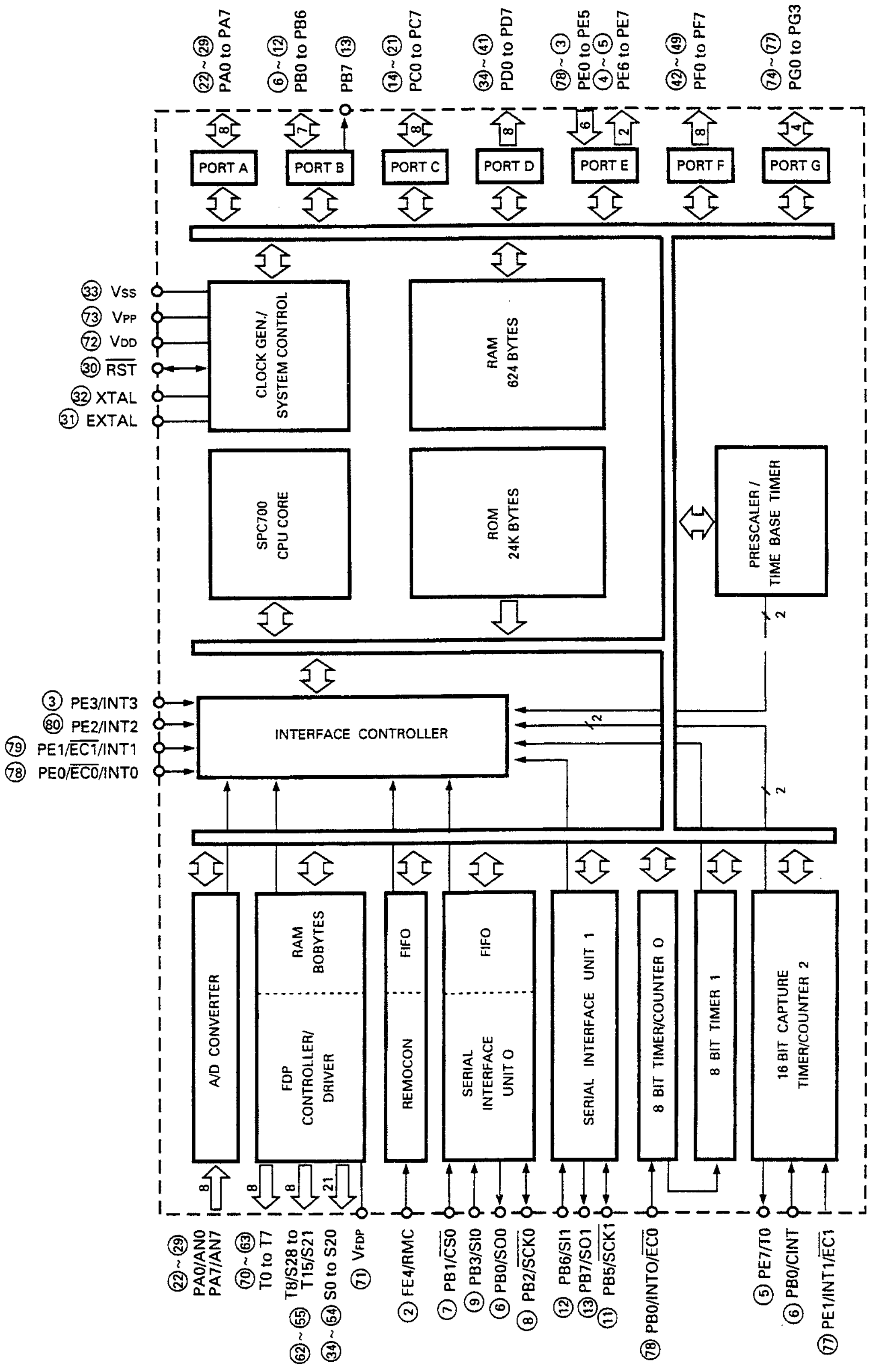
CIRCUIT DESCRIPTION

1. IC201 : CXP82324 (CMOS 8bit 1-Chip Microcomputer)

1-1. Pin Connection Diagram


SCOR
FOK
POWER DOWN
PWR ON/OFF
VCDC/CDC SEL.
SELF WAKE-UP
N.C
VDD
VDD
VFDP(-30V)
1G
2G
3G
4G
5G
6G
GRID
7G
8G
9G
N.C
S1
S2
S3
S4
S5
S6
S7
S8
SEGMENT
S9
S10
S11
S12
S13
S14
S15
S16
CLOSE
GFS
N.C
SENS
LD-ON
XLAT
VIDEO SEL.
MPEG
COMEN
SCK
SO
SI
(This Pins is applied for only VCDC-757)
SQCK
SQSO
DATA
KEY INPUT
DOWN
UP
CLOSE
OPEN
N.C
ONE MODE
N.C
XRST
DIGI LINK
N.C
DISC NO SENS
CXP82324
(CMOS 8bit 1-Chip Microcomputer)
SPDCON
MPX
MPX
N.C
N.C
RST
EXTAL
XTAL
VSS
N.C
LINE MUTE
BWD
FWD
DOWN
UP
OPEN
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80

1-2. Block Diagram



㉒~㉙ PA0 to PA7
⑥~⑫ PB0 to PB6
⑬ PB7
⑭~㉑ PC0 to PC7
㉞~㊶ PD0 to PD7
(78)~③ PE0 to PE5
④~⑤ PE6 to PE7
㊷~㊾ PF0 to PF7
(74)~(77) PG0 to PG3
8
7
8
8
6
2
8
4
PORT A
PORT B
PORT C
PORT D
PORT E
PORT F
PORT G
㉝ Vss
(73) VPP
(72) VDD
㉚ RST
㉜ XTAL
㉛ EXTAL
CLOCK GEN./ SYSTEM CONTROL
RAM 624 BYTES
SPC700 CPU CORE
ROM 24K BYTES
PRESCALER / TIME BASE TIMER
2
③ PE3/INT3
(80) PE2/INT2
(79) PE1/EC1/INT1
(78) PE0/EC0/INT0
INTERFACE CONTROLLER
2
2
A/D CONVERTER
FDP CONTROLLER/ DRIVER
RAM BOBYTES
REMOCON
FIFO
SERIAL INTERFACE UNIT O
FIFO
SERIAL INTERFACE UNIT 1
8 BIT TIMER/COUNTER O
8 BIT TIMER 1
16 BIT CAPTURE TIMER/COUNTER 2
8
8
8
21
㉒~㉙ PA0/AN0 PA7/AN7
(70)~(63) T0 to T7
(62)~(55) T8/S28 to T15/S21
㉞~(54) S0 to S20
(71) VFDP
② FE4/RMC
⑦ PB1/CS0
⑨ PB3/SI0
⑥ PB0/SO0
⑧ PB2/SCK0
⑫ PB6/SI1
⑬ PB7/SO1
⑪ PB5/SCK1
(78) PB0/INT0/EC0
⑤ PE7/T0
⑥ PB0/CINT
(77) PE1/INT1/EC1

1-3. Input and Output Terminal Functions

<table>
<tr><th>Pin No.</th><th>Symbol</th><th>Description</th></tr>
<tr><td>1</td><td>GFS</td><td>GFS signal input from CXD2515Q.</td></tr>
<tr><td>2</td><td>NC</td><td>Not used !</td></tr>
<tr><td>3</td><td>SENS</td><td>Sense signal output to pick-up unit (M-101).</td></tr>
<tr><td>4</td><td>LD-ON</td><td>LD-on signal output to pick-up unit (M-101).</td></tr>
<tr><td>5</td><td>XLAT</td><td>Serial latch data output to CXD2515Q.</td></tr>
<tr><td>6</td><td>VIDEO SEL</td><td>Output for controlling audio signal to 74HC157.
If video CD, then "H" and if normal CD, then "L".</td></tr>
<tr><td>7</td><td>COMEN (MPEG)</td><td>Input for checking data transmission to MPEG CPU.</td></tr>
<tr><td>8</td><td>SCK (MPEG)</td><td>Clock data output to MPEG CPU.</td></tr>
<tr><td>9</td><td>SO (MPEG)</td><td>Serial data output to MPEG CPU.</td></tr>
<tr><td>10</td><td>SI (MPEG)</td><td>Serial data input from MPEG CPU.</td></tr>
<tr><td>11</td><td>SQCK</td><td>Clock data input for subcode-Q readout to CXD2515Q.</td></tr>
<tr><td>12</td><td>SQSO</td><td>Subcode-Q signal input from CXD2515Q.</td></tr>
<tr><td>13</td><td>DATA</td><td>Serial data output to CXD2515Q.</td></tr>
<tr><td>14~17</td><td>KEY INPUT</td><td>Data input for key scan.</td></tr>
<tr><td>18</td><td>NC</td><td>Not used !</td></tr>
<tr><td>19</td><td>ONE MODE</td><td>Input for test mode for production.</td></tr>
<tr><td>20</td><td>NC</td><td>Not used !</td></tr>
<tr><td>21</td><td>XRST</td><td>Output for resetting CXD2515Q. (At "L", it is active)</td></tr>
<tr><td>22</td><td>DIGI-LINK</td><td>Input for remocon data.</td></tr>
<tr><td>23</td><td>NC</td><td>Not used !</td></tr>
<tr><td>24</td><td>DISC NO SENS</td><td>Roulette sensor data input from mecha.</td></tr>
<tr><td>25</td><td>SPDCON</td><td>Output for roulette motor to stop the disc roulette.</td></tr>
<tr><td>26, 27</td><td>MPX SEL</td><td>According to settings, each MPX mode operates as follows.
<table>
<tr><th colspan="2">Pin No.</th><th colspan="2">Signal Output</th></tr>
<tr><td>26</td><td>27</td><td>L-CH.</td><td>R-CH.</td></tr>
<tr><td>"L"</td><td>"H"</td><td>L-CH.</td><td>L-CH.</td></tr>
<tr><td>"H"</td><td>"L"</td><td>R-CH.</td><td>R-CH.</td></tr>
<tr><td>"H"</td><td>"H"</td><td>L+R-CH.</td><td>L+R-CH.</td></tr>
<tr><td>"L"</td><td>"L"</td><td>L-CH.</td><td>L-CH.</td></tr>
</table></td></tr>
<tr><td>28, 29</td><td>NC</td><td>Not used !</td></tr>
<tr><td>30</td><td>RST</td><td>Input for resetting CPU. (At "L", it is active)</td></tr>
<tr><td>31</td><td>EXTAL</td><td>Input of 10.0 MHz oscillator crystal.</td></tr>
<tr><td>32</td><td>XTAL</td><td>Output of 10.0 MHz oscillator crystal.</td></tr>
<tr><td>33</td><td>Vss</td><td>Ground</td></tr>
<tr><td>34</td><td>NC</td><td>Not used !</td></tr>
<tr><td>35</td><td>LINE MUTE</td><td>Output for audio mute. (At "H", it is active)</td></tr>
<tr><td>36</td><td>ROULETTE BWD(-)</td><td>Output for driving motor to rotate counter clockwise the roulette.</td></tr>
<tr><td>37</td><td>ROULETTE FWD(+)</td><td>Output for driving motor to rotate counter clockwise the roulette.</td></tr>
<tr><td>38</td><td>PICK-UP DOWN</td><td>Output for chucking motor to draw down the pick-up.</td></tr>
<tr><td>39</td><td>PICK-UP UP</td><td>Output for chucking motor to draw up the pick-up.</td></tr>
<tr><td>40</td><td>TRAY OPEN</td><td>Output for driving motor to open the tray. (At "H", it is active)</td></tr>
<tr><td>41</td><td>TRAY CLOSE</td><td>Output for driving motor to close the tray. (At "H", it is active)</td></tr>
<tr><td>42~57</td><td>SEGMENT</td><td>Segment signal output for FIP.</td></tr>
<tr><td>58~61</td><td>NC</td><td>Not used !</td></tr>
<tr><td>62~70</td><td>GRID</td><td>Grid signal output of for FIP.</td></tr>
<tr><td>71</td><td>V_{FDP}</td><td>-30 V power supply for FIP controller.</td></tr>
<tr><td>72, 73</td><td>Vdd</td><td>+5 V power supply for CPU.</td></tr>
<tr><td>74</td><td>NC</td><td>Not used !</td></tr>
<tr><td>75</td><td>SELF WAKE-UP</td><td>Input for waking up CPU.</td></tr>
<tr><td>76</td><td>VCDC/CDC SEL</td><td>Input for selecting VCDC-757 or CDC-757.
If "H", then VCDC-757 and if "L", then CDC-757.</td></tr>
<tr><td>77</td><td>PWR ON/OFF</td><td>Output for power off when function changed. (At "L", it is active)</td></tr>
<tr><td>78</td><td>POWER DOWN</td><td>Input for detecting power-down. (At "L", it is active)</td></tr>
<tr><td>79</td><td>FOK</td><td>FOK signal input from CXD2515Q.</td></tr>
<tr><td>80</td><td>SCOR</td><td>GFS signal input from CXD2515Q.</td></tr>
</table>

2. APC CIRCUIT

A semiconductor laser is used as the light source for the optical pickup. As the laser diode has large negative temperature characteristics in its optical output when driven with a constant current, a circuit must be provided to stabilize this output. For this purpose, a monitor diode which detects the optical output of the laser diode is used in the semiconductor laser.
As the laser diode emits light from its bonded surface, light is emitted both in front and behind. The light emitted behind is monitored with the monitor diode installed on its rear surface, and the optical output is thus controlled. The light emitted in front becomes the light source for the pickup.

Fig. 7 shows the APC circuit.
When the temperature rises and the optical output decreases, the monitor diode current (Is) decreases, the electric potential of OE-IC pin 24 rises, the base current of the driving transistor increases, and the laser diode current increases. This causes the reduced optical output to return to its former level.

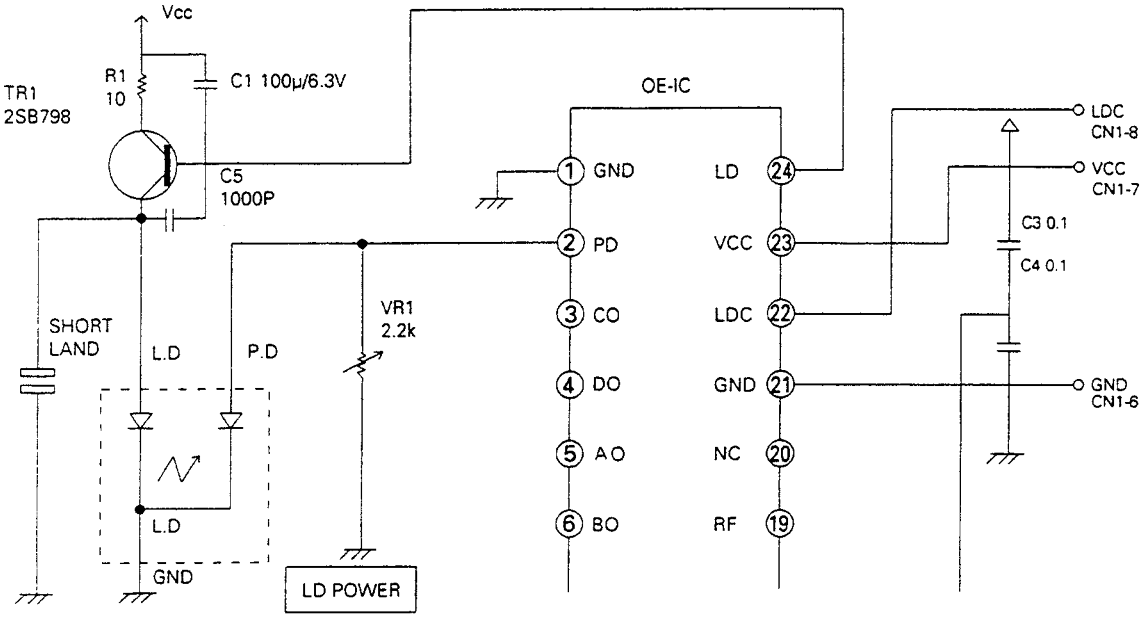
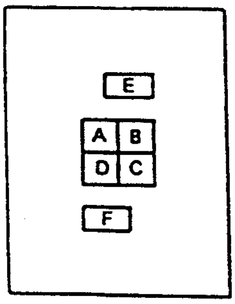


Fig. 7

3. FOCUS SERVO

3-1. Optical pickup

This set employs a three-beam optical pickup comprised of six division photodiodes, A through F as shown in Fig. 8. The four photo diodes (A through D) at the center provide focus error detection by using their property to allow the beam to focus into a round image only at a certain point.
The sums of outputs from diagonal two elements of four division photo diodes (A+C and B+D) are compared by the differential amplifier in OE-IC to detect the shape of the beam image.
The remaining two diodes (E and F) provide tracking error detection by means of sub-beam spots.



Three spotted (six-division) photo diodes

Fig. 8

3-2. Focus error detecting operation

Fig. 9 shows the reflected laser beam from a disc is polarized 90° with the beam-splitter and sent to the cylindrical lens. The beam passed through this cylindrical lens is then sent to the four division photo diodes and focuses into an image whose shape varies with the distance between the disc and the objective lens. Such change in the beam shape causes the current flowing from the photo diodes to vary.

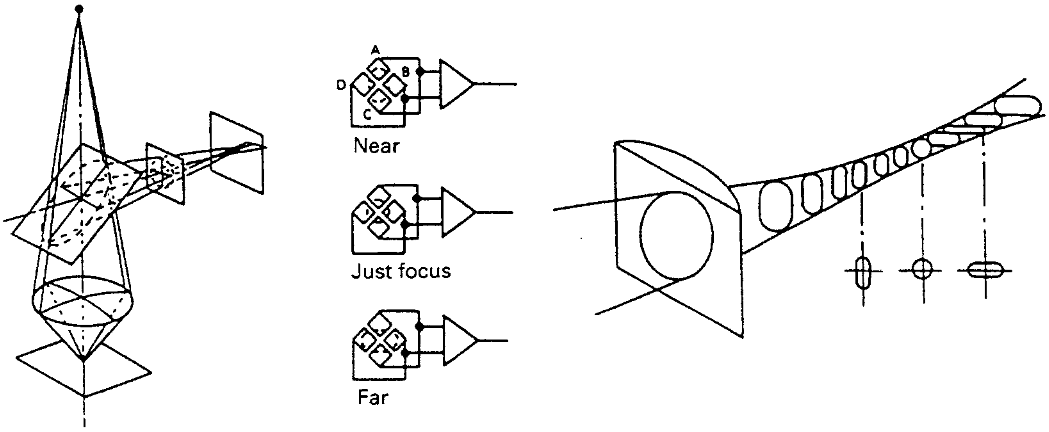


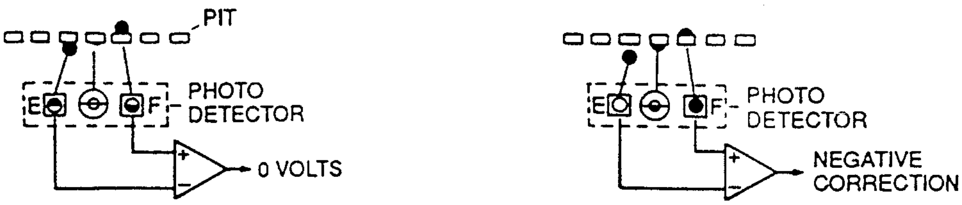
Fig. 9

3-3. Tracking error detection system

Fig. 10 shows the principle of the tracking error detection system which employs the three beam system.

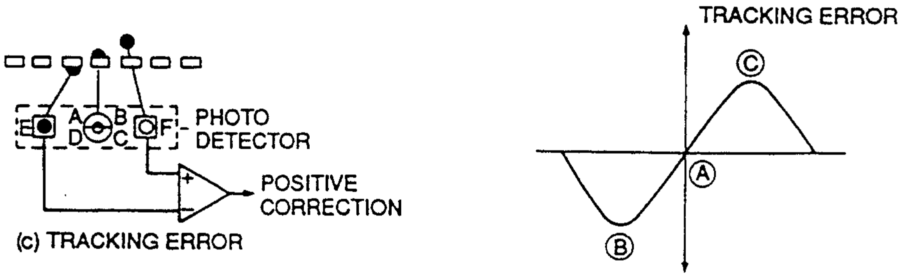
The laser beam is divided into the main beam and two sub-beams by diffraction grating and they are arranged on one line. The center line connecting these three beams has a slight offset angle against the main beam. The main beam is received by photo diodes A, B, C and D and two sub-beams by E and F respectively.

Fig. 10-A shows the on-track state. As both auxiliary beams 1 and 2 are slightly on the track in this state, the outputs of photo diodes E and F are equal and the tracking signal is 0(zero). When the track is shifted to the left (Fig. 10-B), the auxiliary beam 1 is off the pit. This allows more light to be received by the photo diode E, resulting in positive (+) tracking signal output. On the other hand, when the track is shifted to the right (Fig. 10-C), the amount of light received by the photo diode F increases, resulting in negative (-) tracking signal output. And these extreme signals are detected as tracking error signals.



(A) TRACKING CORRECT

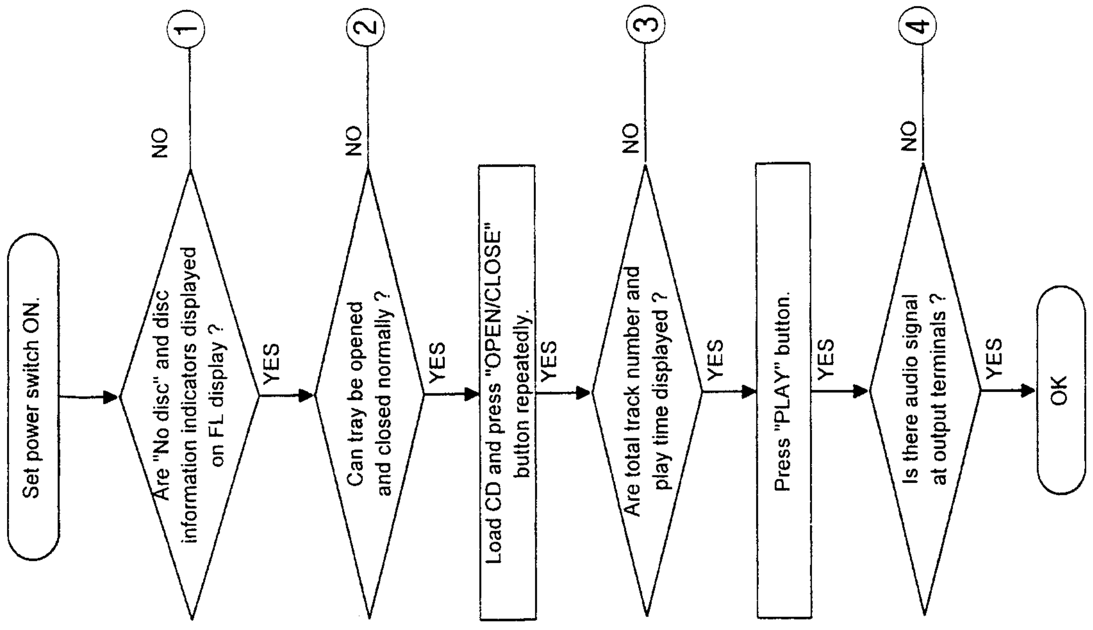
(B) TRACKING ERROR



(C) TRACKING ERROR

Fig. 10

TROBLESHOOTING


Set power switch ON.
Are "No disc" and disc information indicators displayed on FL display ?
NO
①
YES
Can tray be opened and closed normally ?
NO
②
YES
Load CD and press "OPEN/CLOSE" button repeatedly.
YES
Are total track number and play time displayed ?
NO
③
YES
Press "PLAY" button.
YES
Is there audio signal at output terminals ?
NO
④
YES
OK

[Repair item 1] At power on, "0" and some parts are not displayed.

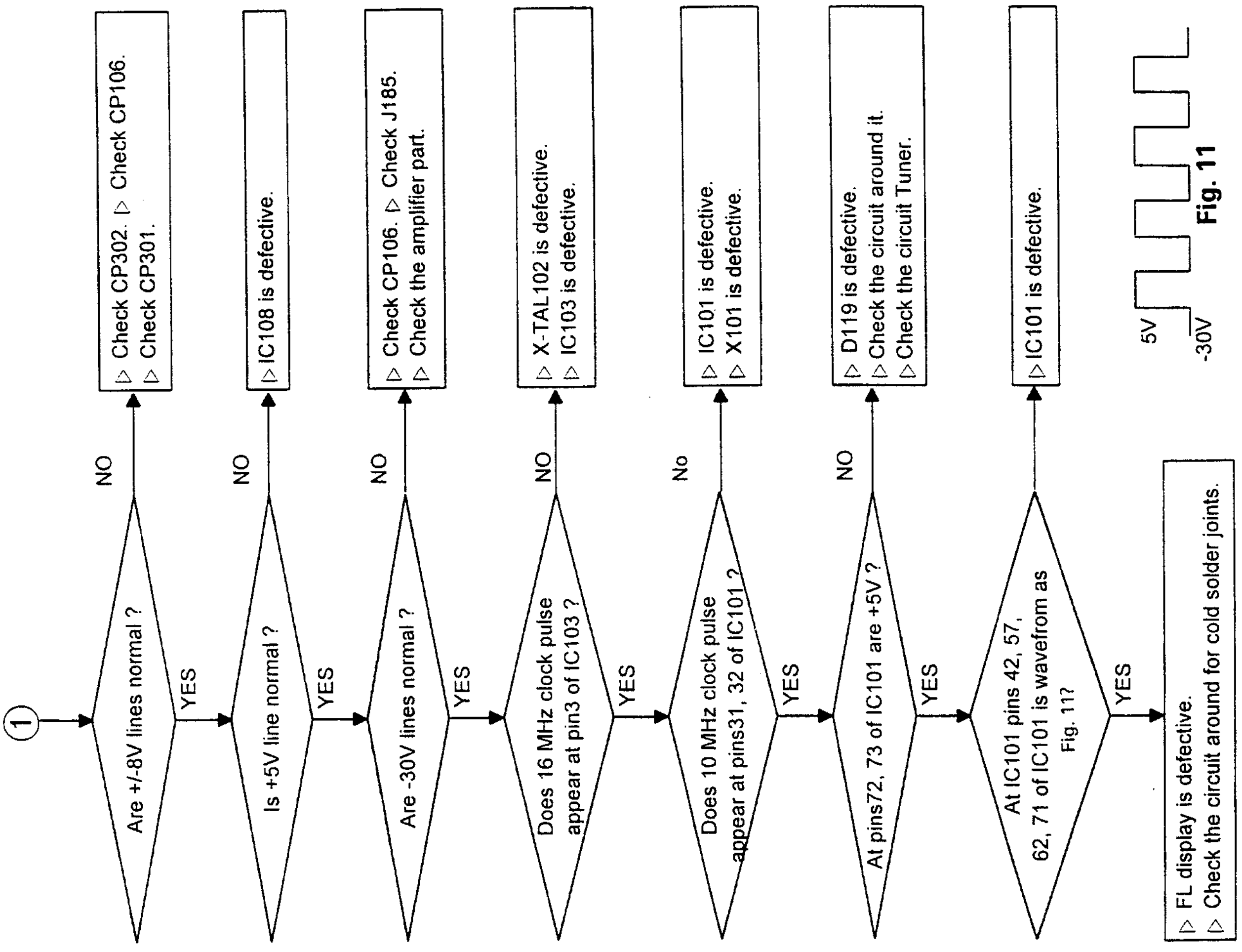
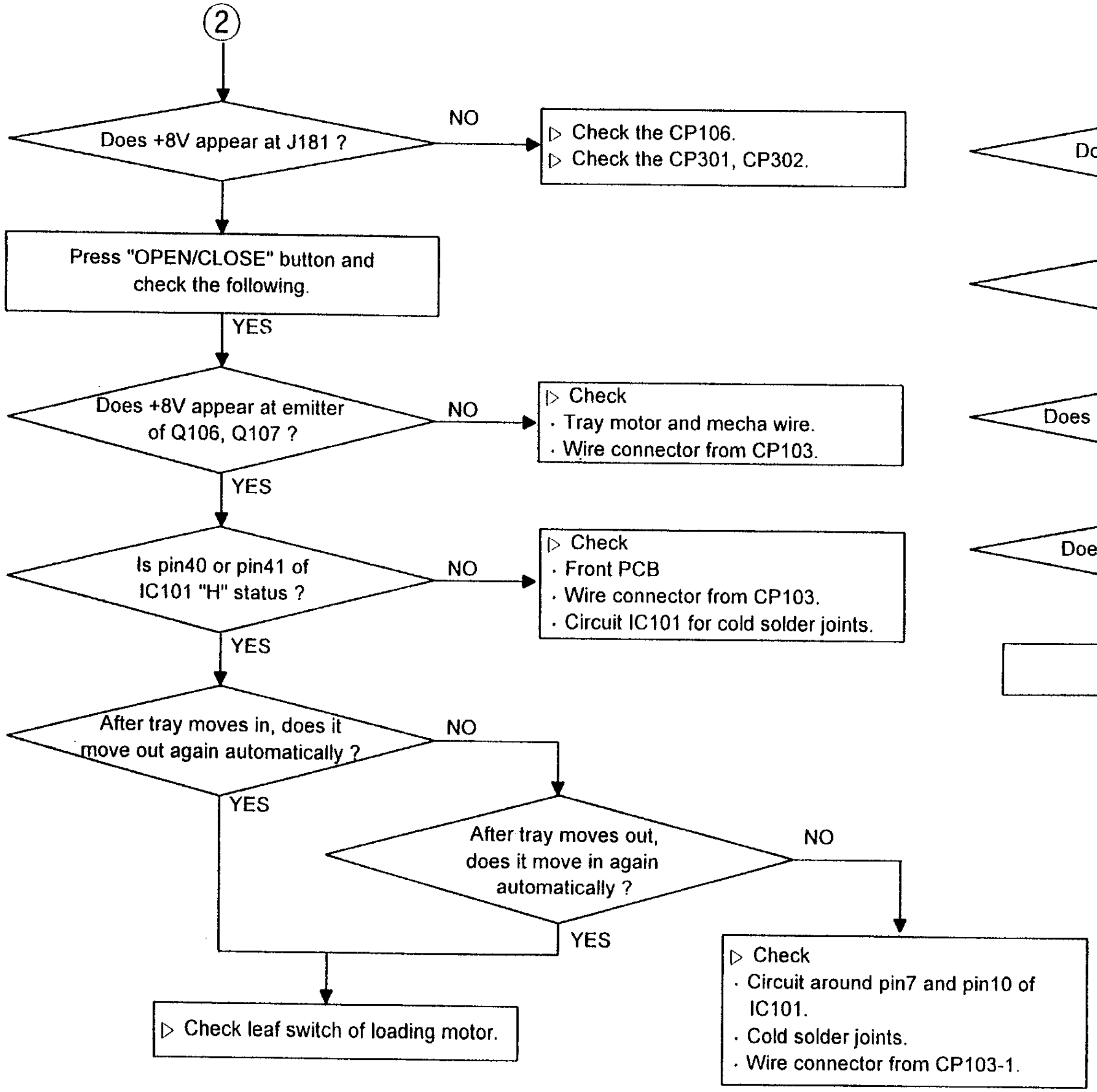
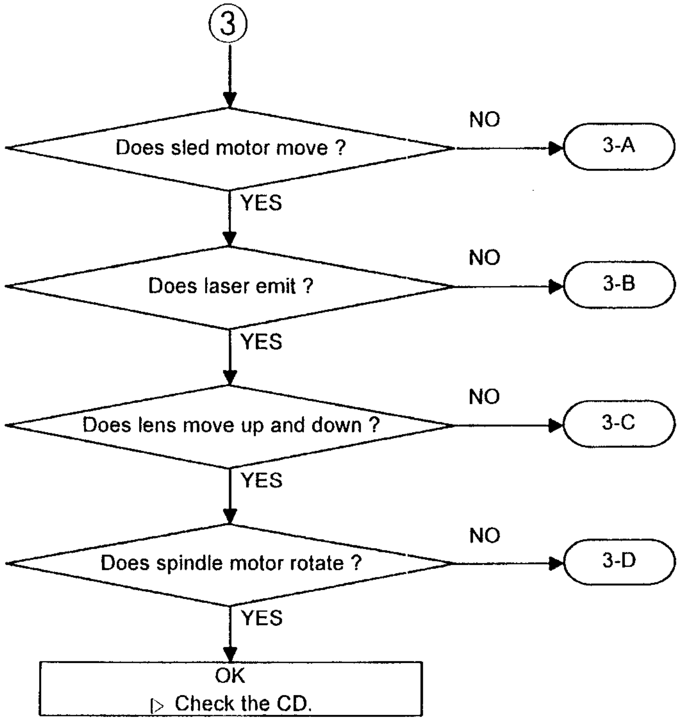

①
Are +/-8V lines normal ?
NO
▷ Check CP302. ▷ Check CP106.
▷ Check CP301.
YES
Is +5V line normal ?
NO
▷ IC108 is defective.
YES
Are -30V lines normal ?
NO
▷ Check CP106. ▷ Check J185.
▷ Check the amplifier part.
YES
Does 16 MHz clock pulse appear at pin3 of IC103 ?
NO
▷ X-TAL102 is defective.
▷ IC103 is defective.
YES
Does 10 MHz clock pulse appear at pins31, 32 of IC101 ?
No
▷ IC101 is defective.
▷ X101 is defective.
YES
At pins72, 73 of IC101 are +5V ?
NO
▷ D119 is defective.
▷ Check the circuit around it.
▷ Check the circuit Tuner.
YES
At IC101 pins 42, 57, 62, 71 of IC101 is wavefrom as Fig. 11?
▷ IC101 is defective.
YES
▷ FL display is defective.
▷ Check the circuit around for cold solder joints.
5V
-30V

Fig. 11

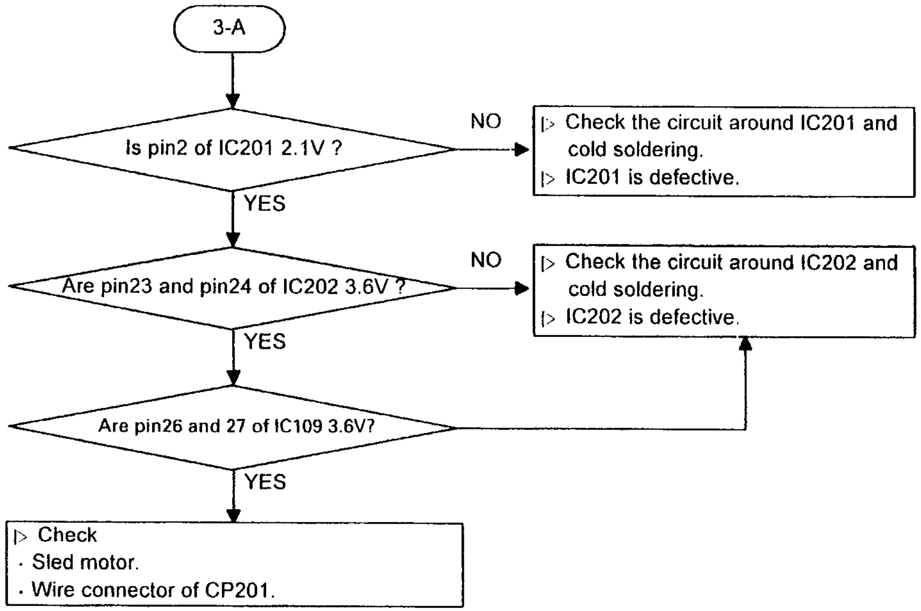
[repair item 2] Tray cannot be opened and closed by pressing "OPEN/CLOSE" button.


②
Does +8V appear at J181 ?
NO
▷ Check the CP106.
▷ Check the CP301, CP302.
Press "OPEN/CLOSE" button and check the following.
YES
Does +8V appear at emitter of Q106, Q107 ?
NO
▷ Check
· Tray motor and mecha wire.
· Wire connector from CP103.
YES
Is pin40 or pin41 of IC101 "H" status ?
NO
▷ Check
· Front PCB
· Wire connector from CP103.
· Circuit IC101 for cold solder joints.
YES
After tray moves in, does it move out again automatically ?
NO
YES
After tray moves out, does it move in again automatically ?
NO
YES
▷ Check leaf switch of loading motor.
▷ Check
· Circuit around pin7 and pin10 of IC101.
· Cold solder joints.
· Wire connector from CP103-1.

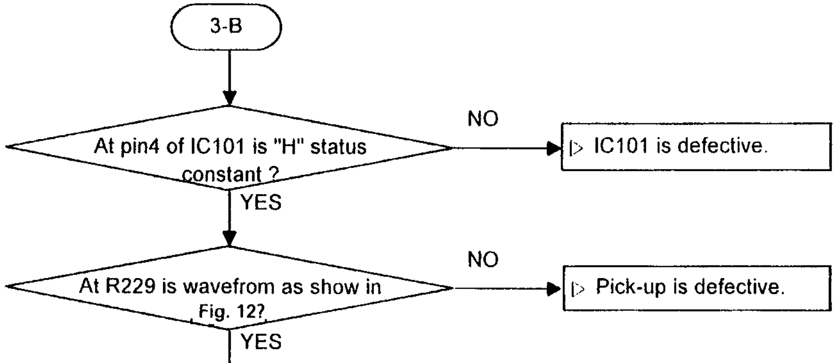
[Repair item 3] "0" is displayed instead of total playing time and track number.


③
Does sled motor move ?
NO
3-A
YES
Does laser emit ?
NO
3-B
YES
Does lens move up and down ?
NO
3-C
YES
Does spindle motor rotate ?
NO
3-D
YES
OK
▷ Check the CD.

[Repair item 3-A] Sled motor dose not move.


3-A
Is pin2 of IC201 2.1V ?
NO
▷ Check the circuit around IC201 and cold soldering.
▷ IC201 is defective.
YES
Are pin23 and pin24 of IC202 3.6V ?
NO
▷ Check the circuit around IC202 and cold soldering.
▷ IC202 is defective.
YES
Are pin26 and 27 of IC109 3.6V?
YES
▷ Check
· Sled motor.
· Wire connector of CP201.

[Repair item 3-B] Laser does not emit.


3-B
At pin4 of IC101 is "H" status constant ?
NO
▷ IC101 is defective.
YES
At R229 is wavefrom as show in Fig. 12?
NO
▷ Pick-up is defective.
YES
▷ Check wire and connector of CP202 and cold soldering.

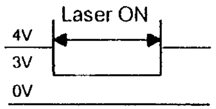
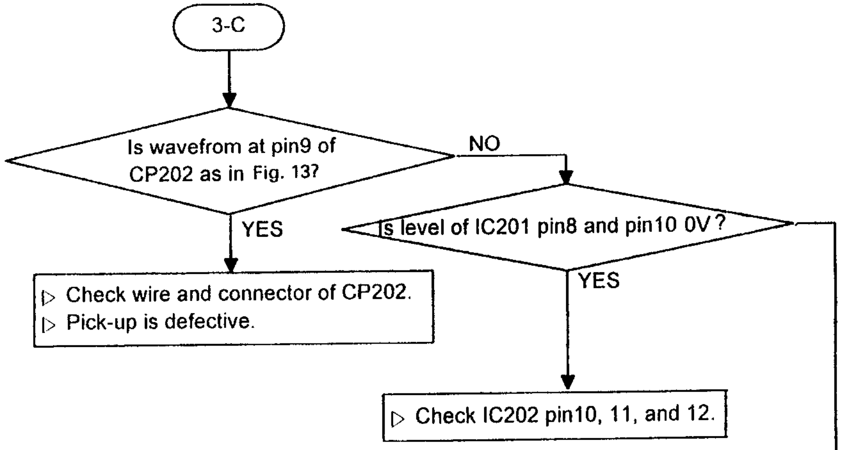

Laser ON
4V
3V
0V

Fig. 12

[Repair item 3-C] Object lens of pickup unit does not move up and down.


3-C
Is wavefrom at pin9 of CP202 as in Fig. 13?
NO
YES
▷ Check wire and connector of CP202.
▷ Pick-up is defective.
Is level of IC201 pin8 and pin10 0V ?
YES
▷ Check IC202 pin10, 11, and 12.

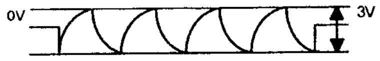
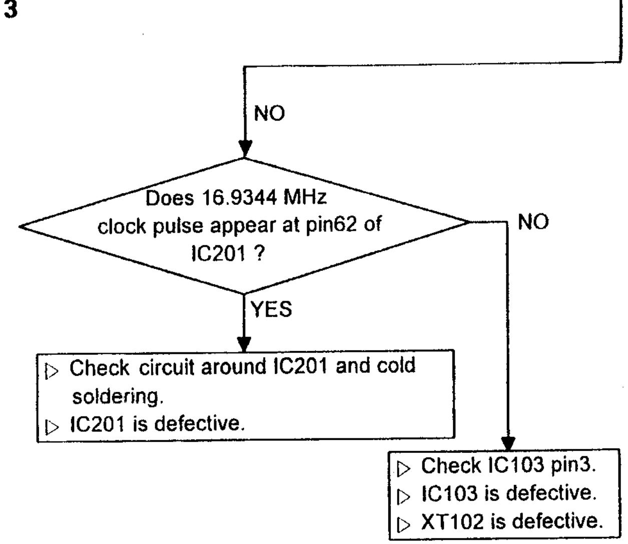
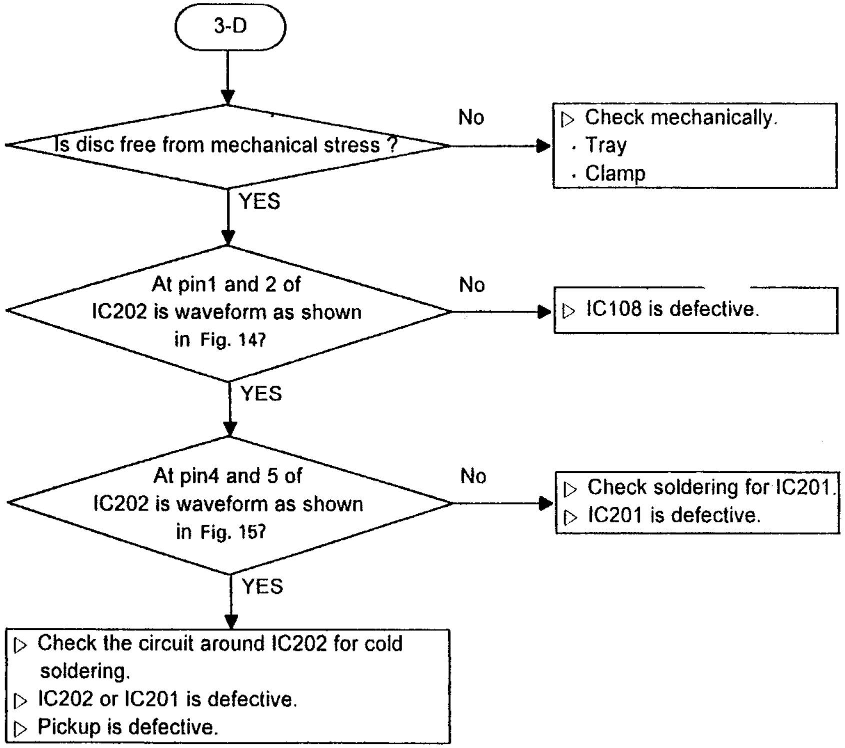


Fig. 13


NO
Does 16.9344 MHz clock pulse appear at pin62 of IC201 ?
NO
YES
▷ Check circuit around IC201 and cold soldering.
▷ IC201 is defective.
▷ Check IC103 pin3.
▷ IC103 is defective.
▷ XT102 is defective.

[Repair item 3-D] Spindle motor does not rotate.


3-D
Is disc free from mechanical stress ?
No
▷ Check mechanically.
· Tray
· Clamp
YES
At pin1 and 2 of IC202 is waveform as shown in Fig. 14?
No
▷ IC108 is defective.
YES
At pin4 and 5 of IC202 is waveform as shown in Fig. 15?
No
▷ Check soldering for IC201.
▷ IC201 is defective.
YES
▷ Check the circuit around IC202 for cold soldering.
▷ IC202 or IC201 is defective.
▷ Pickup is defective.

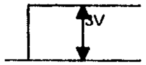


Fig. 14

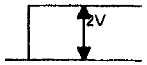
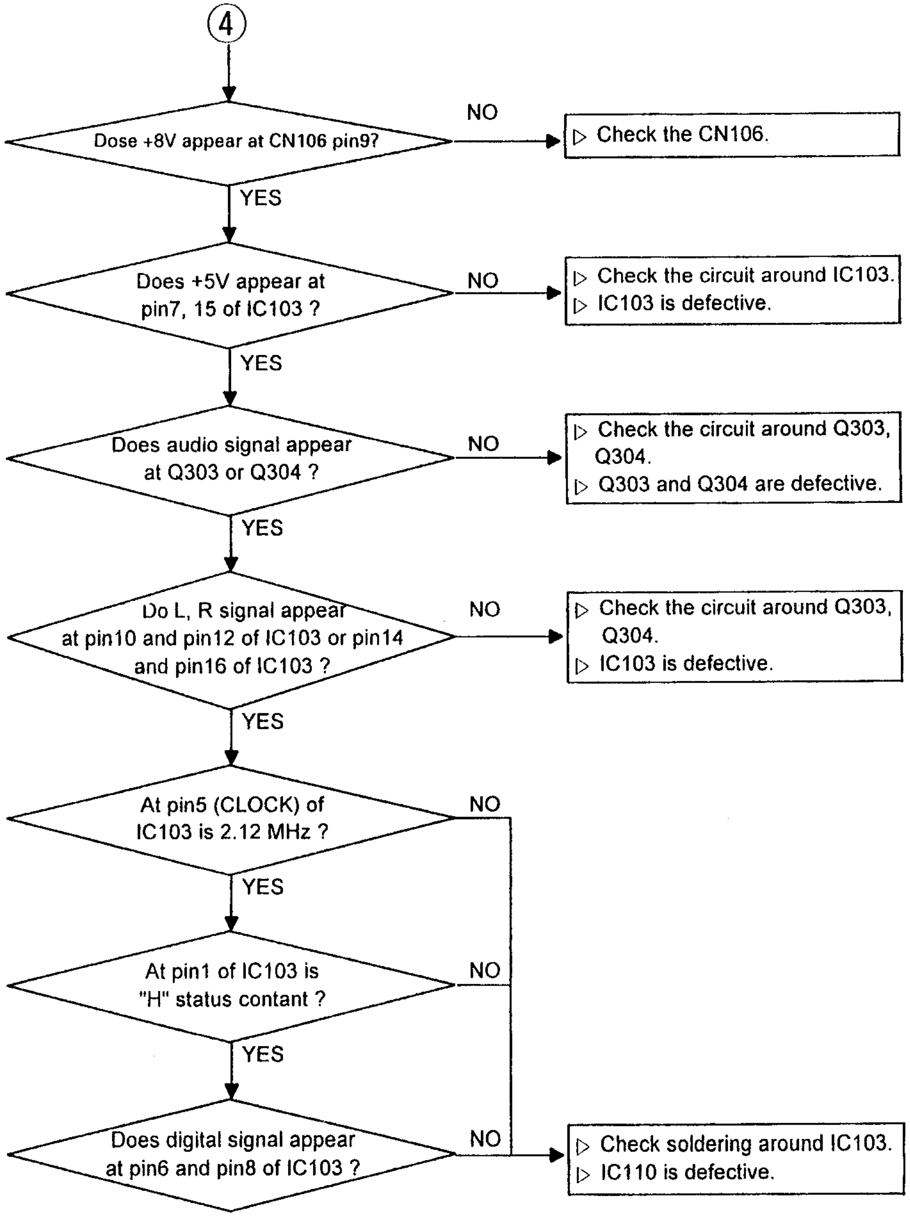


Fig. 15

[Repair item 4] No sound signal.


4
Dose +8V appear at CN106 pin9?
NO
▷ Check the CN106.
YES
Does +5V appear at pin7, 15 of IC103 ?
NO
▷ Check the circuit around IC103.
▷ IC103 is defective.
YES
Does audio signal appear at Q303 or Q304 ?
NO
▷ Check the circuit around Q303, Q304.
▷ Q303 and Q304 are defective.
YES
Do L, R signal appear at pin10 and pin12 of IC103 or pin14 and pin16 of IC103 ?
NO
▷ Check the circuit around Q303, Q304.
▷ IC103 is defective.
YES
At pin5 (CLOCK) of IC103 is 2.12 MHz ?
NO
YES
At pin1 of IC103 is "H" status contant ?
NO
YES
Does digital signal appear at pin6 and pin8 of IC103 ?
NO
▷ Check soldering around IC103.
▷ IC110 is defective.

MECHANICAL PARTS LIST

Ref. No.	Description	Parts No.	Q'ty	Version
	PACKAGE			
	Carton Box	049605258410	1	KS
	Carton Box	049605258403	1	A,D,PT INDO
	Cushion Poly	9722041310	1	
	Film Soft PE	9715000120	1	
	ACCESSORIES			
	Cord Patch, 1P	4328201910	1	KS
	Demo Disc, Video CD	5058001210	1	KS
	CABINET & CHASSIS			
1	Door (CDC757)	048663001412	1	
(1)	Door (VCDC757)	048663001411	1	KS
2	Base Door	6043010510	1	
3	Badge, INKEL	048535045411	1	KS
(3)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO
4	Panel Front (CDC757)	048602019912	1	
(4)	Panel Front (VCDC757)	048602019911	1	KS
5	Window	8553023510	1	
6	Body Front	048521009811	1	
7	Cover Top	046123017911	1	
8	FIP, 9CEM6	2328130322	1	
9	Shield Fence	6163115610	1	
10	Heatsink	7505202410	1	
11	Assembly Mechanism	5728000840	1	
12	Button Function	048543070211	1	
13	Button Skip	048543070311	1	
14	Switch Tact	4658004410	2	
15	Switch Tact	4658003710	10	
16	Foot	6035104310	2	
17	Rubber Foot	6715021230	2	
18	Chassis Main	6121615010	1	
19	Plate Ground	6165143510	1	
20(CP302)	Connector, System	4428513820	1	
21	Jack RCA	4438113810	1	
22	Chassis Back (VCDC757)	'046102045111	1	KS
(22)	Chassis Back (CDC757)	'046102045211	1	KS
(22)	Chassis Back	'046102045221	1	A
(22)	Chassis Back	'046102045251	1	D
(22)	Chassis Back	'046102045291	1	PT INDO
	HARDWARE KIT			
S1	Screw, #B BTT 3x8B (VCDC757)	8179130083	27	KS
(S1)	Screw, #B BTT 3x8B (CDC757)	8179130083	24	
S2	Screw, #2 FTC 3x10B	8129230083	9	
S3	Screw, #B WTT 3x6Y	8179230061	2	
S4	Screw Gurond, 3x10B (VCDC757)	8155000710	2	KS
(S4)	Screw Gurond, 3x10B (CDC757)	8155000710	1	
S5	Screw, #2 BTC 2.6x8B	8109260083	3	
	MISCELLANEOUS			
	Connector, Lead Ass'y, 6P, 80mm	435206082042	1	
	Connector, Lead Ass'y, 14P, 420mm	435214422022	1	
	Card Cable, 12P	4118512100	1	
	Card Cable, 19P	4118619085	1	
PCB1	P.C.Board Main	4004000700	1	
PCB2	P.C.Board DSP	4004000710	1	
PCB3	P.C.Board CNT	4004000730	1	
PCB4	P.C.Board Front 1	4004000720	1	
PCB5	P.C.Board Front 2	4004000750	1	
PCB6	P.C.Board Video Jack (VCDC757)	4004000740	1	KS
(PCB6)	Not Used ! (CDC757)			A,D,PT INDO
PCB7	P.C.Board MPEG (VCDC757)	4009000100	1	KS
(PCB7)	Not Used ! (CDC757)			A,D,PT INDO
11	**ASSEMBLY MECHANISM (ICM02D)**	**5728000840**		
1	Gear Center	7105000410	2	
2	Gear Pulley	7105000510	1	
3	Gear Roulette	7105000610	1	
4	Gear Motor	7105000710	1	
5	Gear Worm	7105000810	1	
6	Bracket Side	6505133510	4	
7	Chuck Chassis	6023408710	1	
8	Bracket Motor	6023801010	1	
9	Frame Front	6023601320	1	
10	Guide Chuck	6063103110	1	
11	Gear Loading	7103001910	1	
12	Base D.U	6062101520	1	
13	Cam Gear	7142000510	1	
14	Cover Cam	7142000610	1	
15	Roultte	7121400320	1	
16	Tray Roulette	6021800410	1	
17	Body Mecha	6021601310	1	
18	Rubber Limit	6715022810	2	
19	Rubber Bracket	6715023310	3	
20	Shaft Gear Roulette	7005007910	1	
21	Cover Roulette	6735011410	1	
22	Sheet Tray	6705022510	1	
23	Sheet Tapping	6725003610	1	
24	Belt Loading	7165002510	1	
25	P.C.Board Sensor	4009500500	1	
26	Base Magnet	6063103010	1	
27	Cover Magnet	6023408610	1	
28	Magnet	5125000910	1	
29	Pulley Motor	7113001310	1	
30	Rubber Damping	6715024510	4	
31	Spring Damping	6555014010	4	
32	Poly Washer (⌀2.1)	8338300710	1	
33	Poly Washer (⌀4.1)	8338301310	1	
34	Poly Washer (⌀5.2)	8338301410	1	
35	Poly Washer (⌀3.1)	8338301210	1	
36	Screw Mecha	8155001210	3	
37	Screw Damping	8155001610	4	
38	Screw BM 2x3Y	8009120031	2	
39	Screw BM 2.6x4Y	8009126041	4	
40	Screw #1 WPT 2.6x8Y	8159126081	2	
41	Screw #1 BT 2.6x8Y	8109126080	2	
42	Screw #1 BT 3x8Y	8109130081	3	
43	Screw #1 BT 3x10B	8109130101	6	
44	Screw #1 WPT 3x15Y	8159130151	1	
45	Screw BTTS 3x4Y	8109430051	1	
46	Connector, Lead Ass'y, 5P	436105080121	1	
47	Connector, Lead Ass'y, 5P.	436105080121	1	
48	Connector, Wafer, 5P	5798100307	1	
49	Connector, Lead Ass'y, 2P	436202070132	1	
50	Connector, Wafer, 2P		1	
51	Resistor, 150 ohm, 1/5 W, J	3069151970	1	
52	Resistor, 10 kohm, 1/5 W, J	3069103970	1	
53	Drive Unit, KSM-2401ABM)	5728001110	1	
54	Motor, RF-500TB-12560	5558001810	1	
55	Motor, FF-130SH-14230	5558200410	1	
56	Switch Lever, SSCF-21004A	4638003410	2	
57	Photo Sensor, SG-23F1	[illegible]8001111	1	

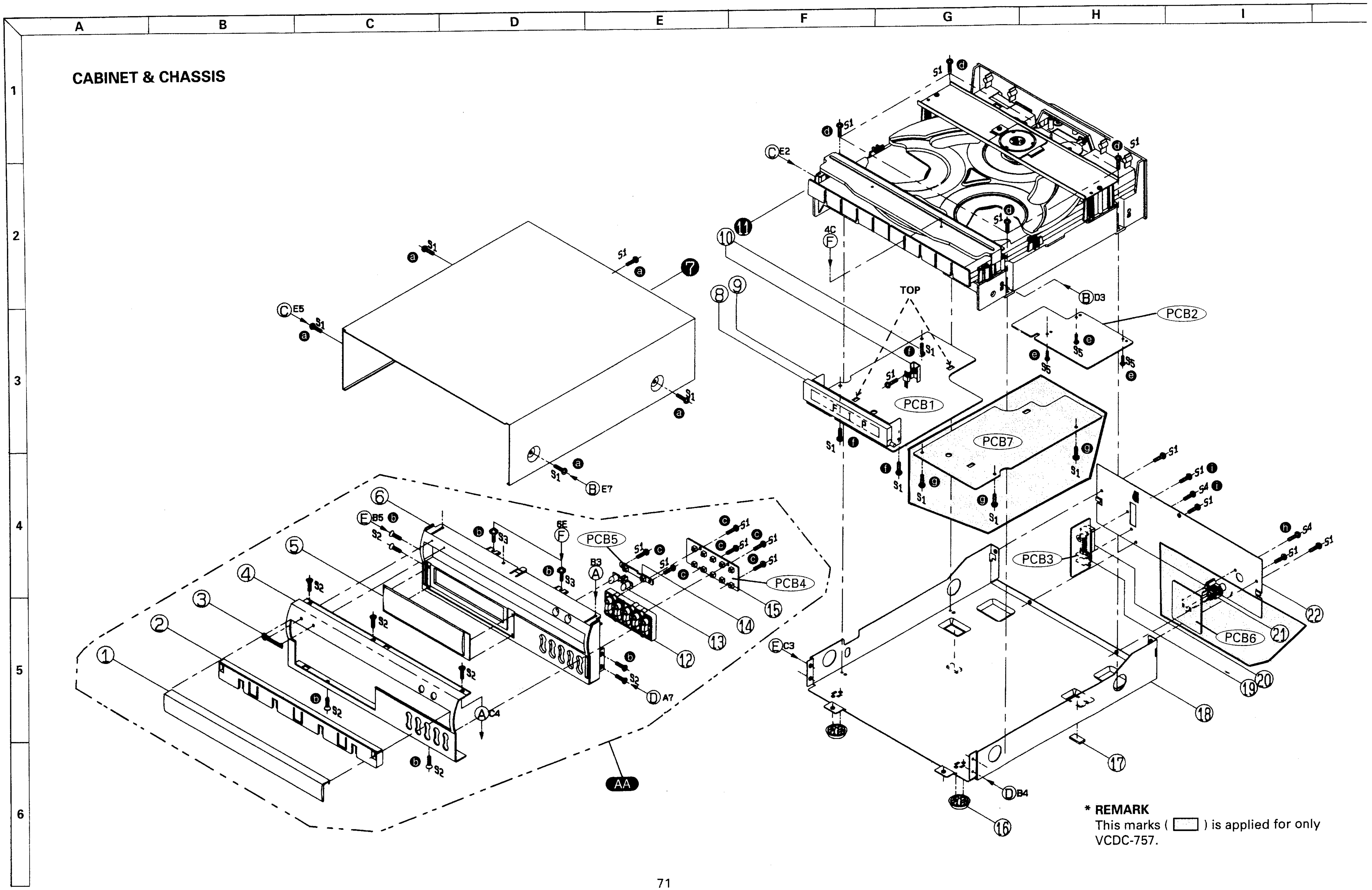
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list are of special significance to safety. When replacing a component identified with ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW I

Model No : CDC-757/VCDC-757

CABINET & CHASSIS

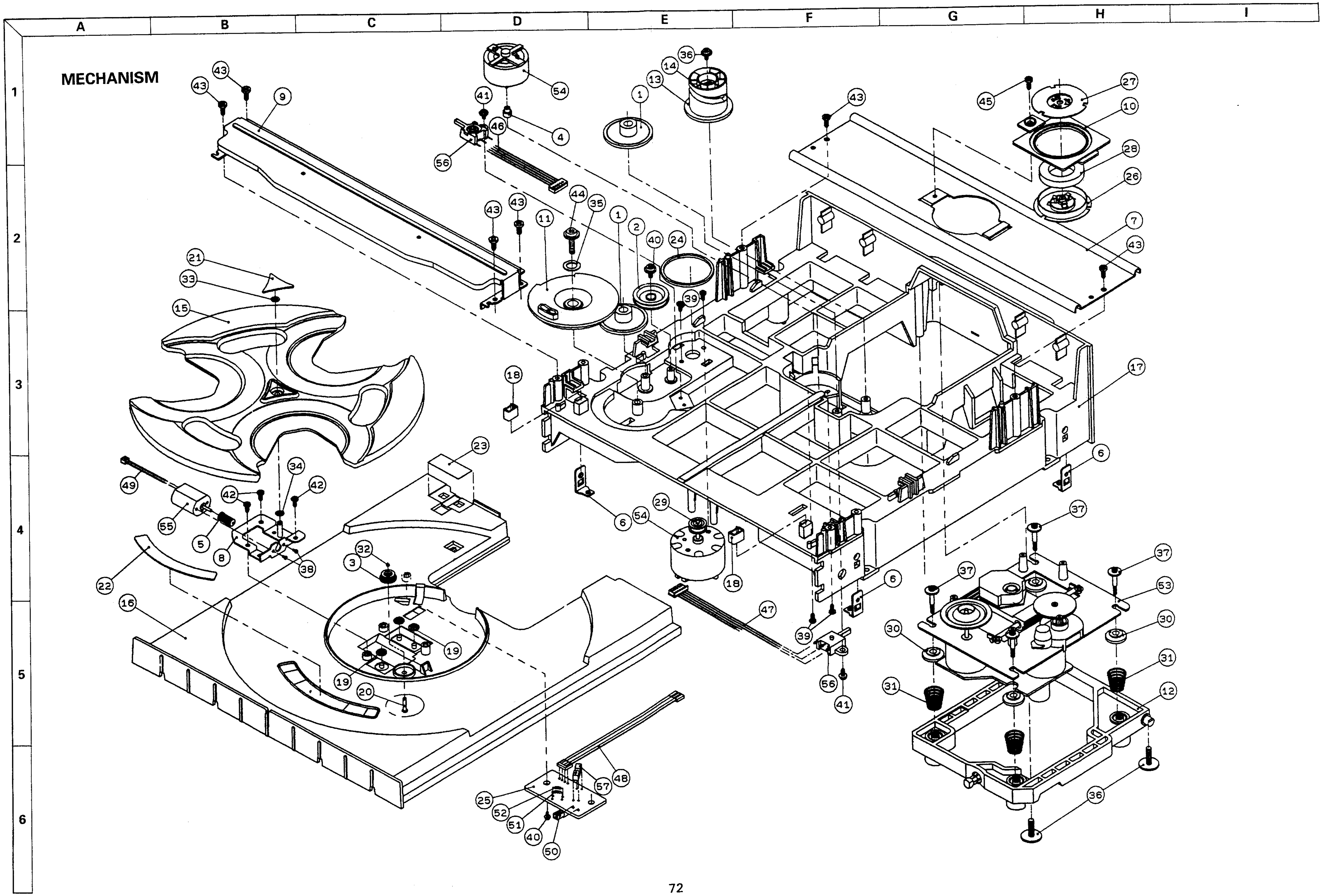

A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
①
②
③
④
⑤
⑥
❼
⑧
⑨
⑩
⓫
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
PCB1
PCB2
PCB3
PCB4
PCB5
PCB6
PCB7
TOP
AA
ⒶC4
Ⓐ B3
ⒷE7
ⒷD3
ⒸE5
ⒸE2
ⒹA7
ⒹB4
ⒺB5
ⒺC3
Ⓕ 6E
Ⓕ 4C
S1
S2
S3
S4
S5
a
b
c
d
e
f
g
h
i

*** REMARK**

This marks (☐) is applied for only VCDC-757.

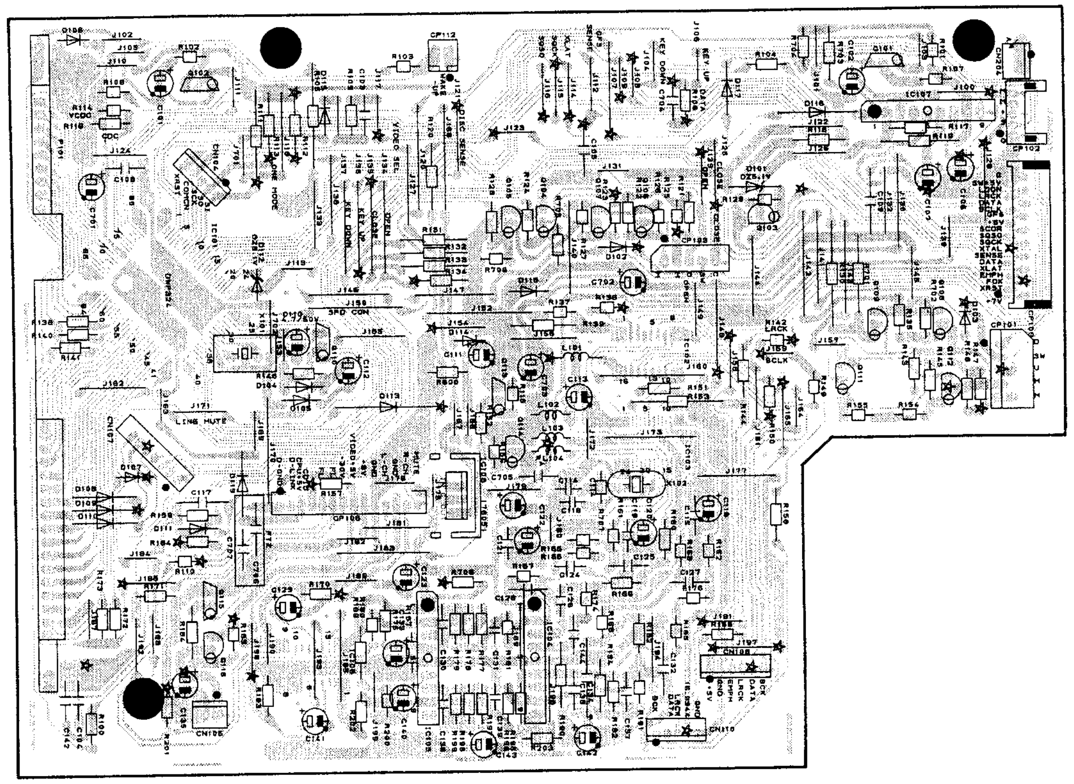
EXPLODED VIEW II

Model No : CDC-757/VCDC-757


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
MECHANISM
43
43
9
54
41
46
56
4
36
14
13
1
43
45
27
10
28
26
7
43
43
43
11
44
35
1
2
40
24
39
21
33
15
18
17
23
34
49
42
42
55
5
8
38
22
32
3
6
6
29
54
18
6
47
37
37
37
53
30
30
31
31
12
39
56
41
16
19
19
20
48
57
25
52
51
40
50
36

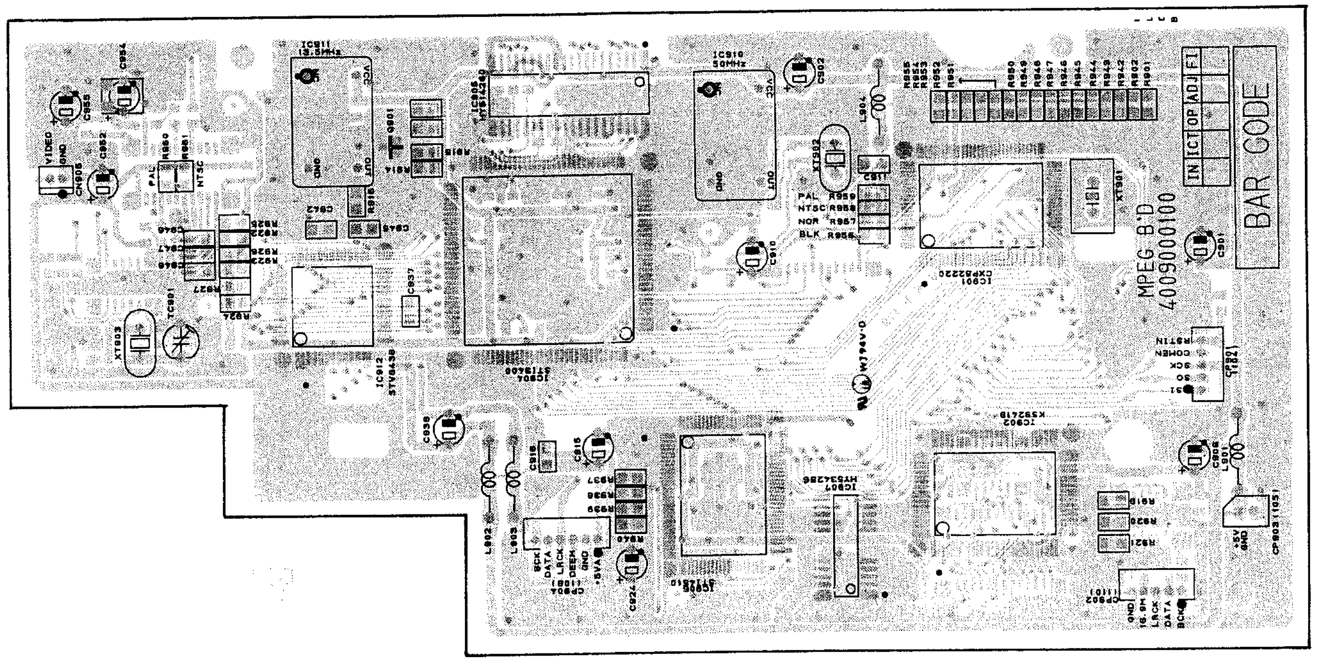
PRINTED CIRCUIT BOARDS

MAIN(PCB1)

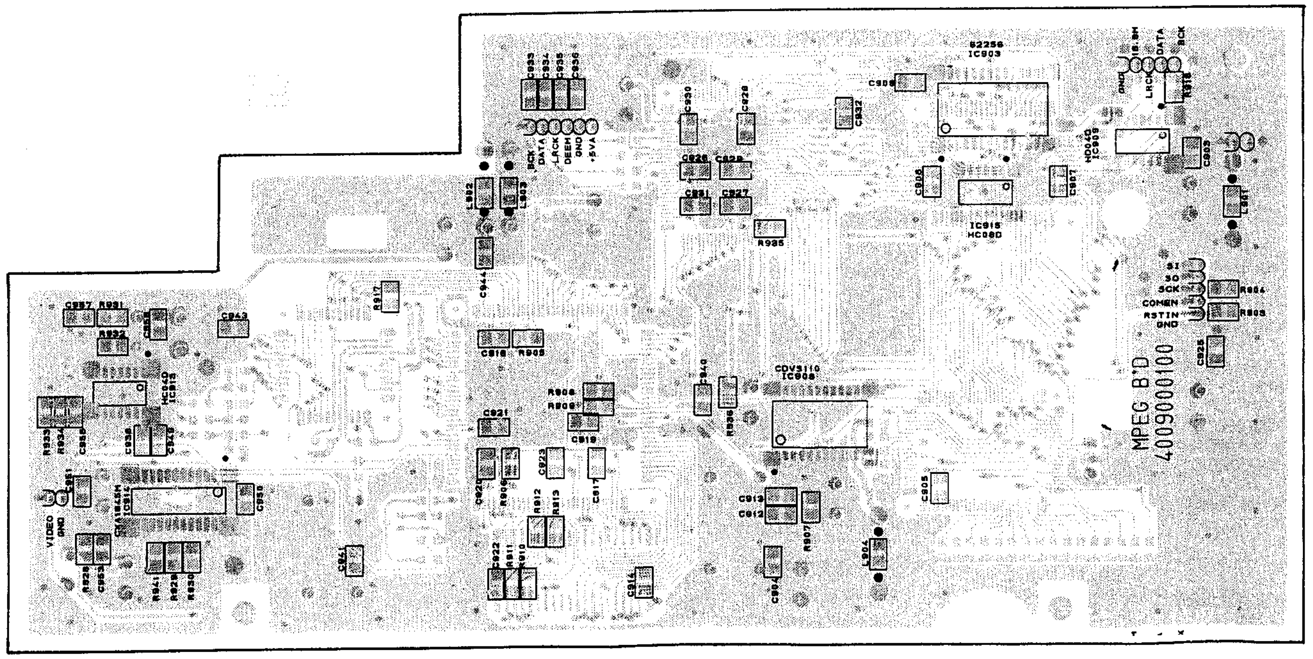


MPEG(PCB7) : VCDC757 ONLY

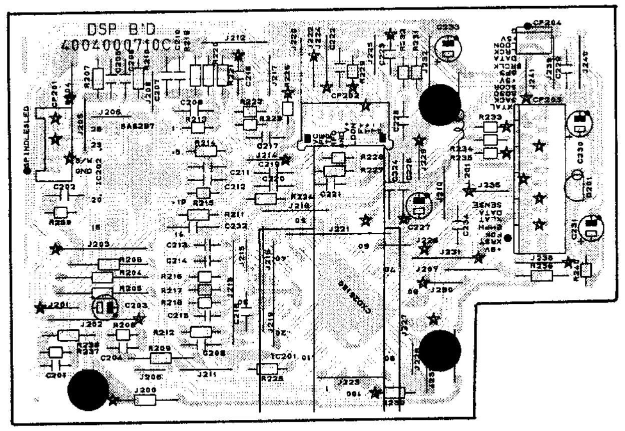
- Top View -


MPEG B'D
4009000100
BAR CODE
IN
ICT
OP
ADJ
FI

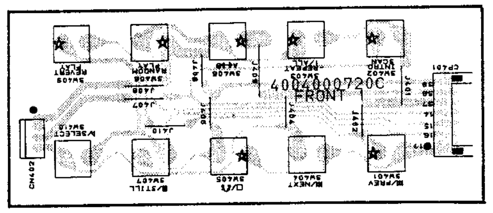
-Bottom View -


MPEG B'D
4009000100

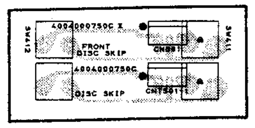
DSP(PCB2)


DSP B'D
4004000710C

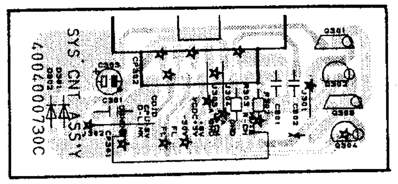
FRONT 1(PCB4)


4004000720C
FRONT

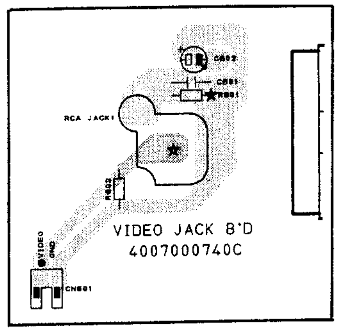
FRONT 2(PCB5)



CNT(PCB3)


SYS CNT ASSY
4007000730C

VIDEO JACK(PCB6) : VCDC757ONLY


RCA JACK1
VIDEO JACK B'D
4007000740C
CN801

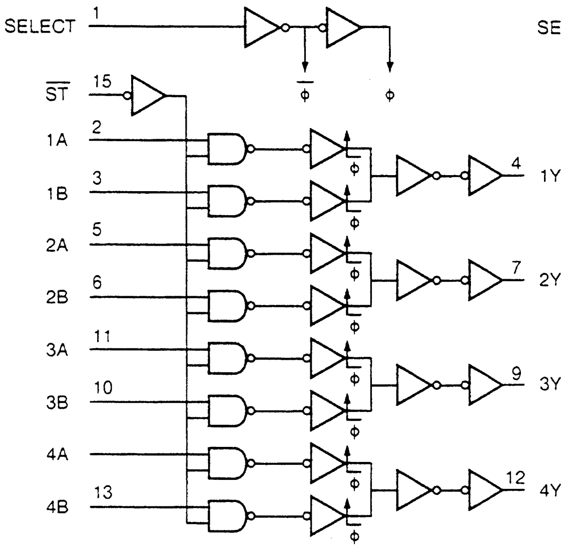
ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE : Products marked with ⚠ have special characteristics important to safety.
If you replace any of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicing.
Resistor/Capacitor tolerance – D : (±0.5%), J : (±5%), K : (±10%), M : (±20%), Z : +80, – 20%)

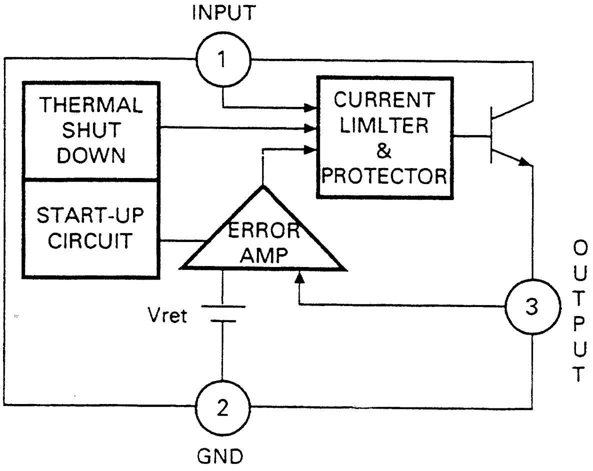
Ref. No.	Description					Parts No.	Q'ty	Version
PCB1	**ASSEMBLY P.C.BOARD MAIN**							
	CAPACITORS							
C101	Electrolytic SG	4.7	uF	50 V	M	3479347971	1	
C102	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C103	Ceramic Tubular	1000	pF	50 V	J	3519102935	1	
C105	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
C106/C107	Electrolytic SG	100	uF	10 V	M	3479310121	2	
C108/C109	Ceramic Tubular	0.1	uF	50 V	J	3519104935	2	
C110	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C111	Electrolytic SG	2.2	uF	50 V	M	3479322971	1	
C113/C114	Electrolytic SG	100	uF	10 V	M	3479310121	2	
C115	Ceramic Tubular	0.022	pF	50 V	J	3519223935	1	
C116	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C117	Ceramic Tubular	220	pF	50 V	J	3519221935	1	
C118	Ceramic Disc, CH	33	pF	50 V	J	3528330210	1	
C119	Ceramic Tubular	0.022	pF	50 V	J	3519223935	1	
C120	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C121	Ceramic Tubular	0.022	pF	50 V	J	3519223935	1	
C122/C123	Electrolytic SG	100	uF	10 V	M	3479310121	2	
C124-C128	Ceramic Tubular	120	pF	50 V	J	3519121935	5	
C129	Electrolytic SG	10	uF	50 V	M	3479310071	1	
C130	Ceramic Tubular	100	pF	50 V	J	3519101935	1	
C131	Mylar	0.001	uF	100 V	J	3679102120	1	
C132	Ceramic Tubular	120	pF	50 V	J	3519121935	1	
C133	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C134	Ceramic Tubular	120	pF	50 V	J	3519121935	1	
C135	Electrolytic SG	1	uF	50 V	M	3479310971	1	
C136	Ceramic Tubular	120	pF	50 V	J	3519121935	1	
C137	Ceramic Tubular	100	pF	50 V	J	3519101935	1	
C138	Ceramic Tubular	100	pF	50 V	J	3519101935	1	
C139	Mylar	0.001	uF	100 V	J	3679102120	1	
C140	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C141	Electrolytic SG	10	uF	50 V	M	3479310071	1	
C142	Ceramic Tubular	0.1	uF	50 V	J	3519104935	1	
C143	Electrolytic SG	100	uF	10 V	M	3479310121	1	
C144	Ceramic Tubular	120	pF	50 V	J	3519121935	1	
C701	Electrolytic SG	470	uF	10 V	M	3479347121	1	
C702	Electrolytic SG	470	uF	10 V	M	3479347121	1	
C704	Ceramic Tubular	1000	pF	50 V	J	3519102935	1	
	CONNECTORS							
CN104	Lead Ass'y, 5P, 220mm					436205223782	1	
CN105	Lead Ass'y, 2P, 80mm					436101083167	1	
CN106	Lead Ass'y, 14P, 420mm					435214423822	1	
CN107	Lead Ass'y, 7P, 180mm					436207183332	1	
CN108	Lead Ass'y, 6P, 80mm					436206083132	1	
CN110	Lead Ass'y, 5P, 100mm					436205103132	1	
CP101	Wafer, 5P					4428513450	1	
CP102	Wafer, 5P					4428525550	1	
CP103	Wafer, 5P					4428506910	1	
CP109	Wafer, FPC, 19P					4428526316	1	
	DIODES							
D101	Zener, UZ 5.1 BSB					2258599103	1	
D102-D111	1N4148, Switching					2058322101	10	
D112	Zener, UZ 5.1 BSB					2258599103	1	
D113-D119	1N4148, Switching					2058322101	7	
	INTEGRATED CIRCUITS							
IC101	CXP82324-330Q					2139322703	1	
IC102	GD74HC157					2139036002	1	
IC103	SM5874AM, DA Converter					2139937001	1	
IC104/105	KIA4559S/KIA75559S					2168206103	2	
IC106	NJM4052BCF					2168027107	1	
IC107	TA7291S					2168007204	1	
IC108	KA7805, Regulator					2168602105	1	
	COILS							
L101-L104	Inductor, 10 uH					2648610082	4	
	TRANSISTORS							
Q101/Q102	DTC114YS					2208622106	2	
Q103-Q105	KTC3198Y, NPN					2208606105	3	
Q106/Q107	KTA1015/BKTA1266Y, PNP					2208206105	2	
Q108/Q109	KTC3198Y, NPN					2208606105	2	
Q110	DTC114YS					2208622106	1	
Q111/Q112	KTA1015/BKTA1266Y, PNP					2208206105	2	
Q113	DTC114YS					2208622106	1	
Q114	KTA966A/KTA1273, PNP					2228106104	1	
Q115	DTC114YS					2208622106	1	
Q116	KTA966A/KTA1273, PNP					2228106104	1	
	RESISTORS							
R100/R101	Carbon Film	2.2	ohm	1/5 W	J	3069229970	2	
R102	Carbon Film	3.3	kohm	1/5 W	J	3069332970	1	
R103	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R104	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R105	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R106	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R107	Carbon Film	1.2	kohm	1/5 W	J	3069122970	1	
R108	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R109	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R110	Carbon Film	2.2	ohm	1/5 W	J	3069229970	1	
R111-R113	Carbon Film	68	kohm	1/5 W	J	3069683970	3	
R114	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R115	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R116	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R117	Metal Film	1	ohm	1/5 W	J	3029109970	1	
R118	Carbon Film	4.7	kohm	1/5 W	J	3069472970	1	
R119	Carbon Film	3.3	kohm	1/5 W	J	3069332970	1	
R120	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R121	Metal Film	33	ohm	1/5 W	J	3029330970	1	
R122/R123	Metal Film	560	ohm	1/5 W	J	3029561970	2	
R124	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R125	Metal Film	56	ohm	1/5 W	J	3029560970	1	
R126/R127	Metal Film	2.2	kohm	1/5 W	J	3029222970	2	
R128	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R129	Metal Film	270	ohm	1/5 W	J	3029271970	1	
R130	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R131-R134	Carbon Film	47	kohm	1/5 W	J	3069473970	4	
R135	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R136	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R137	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R138	Carbon Film	120	kohm	1/5 W	J	3069124970	1	
R139	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R140/R141	Carbon Film	120	kohm	1/5 W	J	3069124970	2	
R142	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R143	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R144	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R145	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R146	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R147/R148	Metal Film	33	ohm	1/5 W	J	3029330970	2	
R149-R151	Metal Film	100	ohm	1/5 W	J	3029101970	3	
R152	Carbon Film	750	ohm	1/5 W	J	3069751970	1	
R153	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R154/R155	Metal Film	2.2	kohm	1/5 W	J	3029222970	2	
R156	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R157	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R158	Metal Film	330	ohm	1/5 W	J	3029331970	1	
R159	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R160-R163	Carbon Film	10	kohm	1/5 W	J	3069103970	4	
R164	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R165/R166	Carbon Film	33	kohm	1/5 W	J	3069333970	2	
R167	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R168	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R169	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R170	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R171	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R172/R173	Carbon Film	120	kohm	1/5 W	J	3069124970	2	
R174	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R175	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R176	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R177	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R178	Carbon Film	20	kohm	1/5 W	J	3069203970	1	
R180	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R181	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R182	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R183	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R184	Carbon Film	750	ohm	1/5 W	J	3069751970	1	
R185/R186	Carbon Film	33	kohm	1/5 W	J	3069333970	2	
R187	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R188	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R189	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R190-R192	Carbon Film	47	kohm	1/5 W	J	3069473970	3	
R193	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R194	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R195	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R196	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R197	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R198	Carbon Film	20	kohm	1/5 W	J	3069203970	1	
R701-R706	Carbon Film	47	kohm	1/5 W	J	3069473970	6	
R707	Carbon Film	1	Mohm	1/5 W	J	3069105970	1	
R800	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
	MISCELLANEOUS							
X101	Resonator, CST10.00MTW					3938131750	1	
X102	Crystal, 16.9344 MHz					3938101500	1	
8	FIP, 9CEM6					2328130322	1	
9	Shield Fence					6163115610	1	
10	Heatsink					7505202410	1	
PCB2	**ASSEMBLY P.C.BOARD DSP**							
	CAPACITORS							
C201	CeramicTubular	680	pF	50 V	J	3519681935	1	
C202	CeramicTubular	0.002	uF	50 V	Z	3519223935	1	
C203	Electrolytic SG	470	uF	10 V	M	3479347121	1	
C204	CeramicTubular	680	pF	50 V	J	3519681935	1	
C205/C206	CeramicTubular	0.022	uF	50 V	Z	3519223935	2	
C207	CeramicTubular	0.1	uF	50 V	Z	3519104935	1	
C208	CeramicTubular	0.0022	uF	50 V	Z	3519222935	1	
C210/C211	CeramicTubular	0.1	uF	50 V	Z	3519104935	2	
C212	CeramicTubular	680	pF	50 V	J	3519681935	1	
C214	Mylar	0.0015	uF	100 V	J	3679152120	1	
C216	CeramicTubular	0.01	uF	50 V	J	3519103935	1	
C217	CeramicTubular	470	pF	50 V	J	3519471935	1	
C219	CeramicTubular	0.1	uF	50 V	Z	3519104935	1	
C220	CeramicTubular	100	pF	50 V	J	3519101935	1	
C221	CeramicTubular	0.01	uF	50 V	J	3519103935	1	
C222	CeramicTubular	0.1	uF	50 V	Z	3519104935	1	
C223	CeramicTubular	470	pF	50 V	J	3519471935	1	
C224	CeramicTubular	0.022	uF	50 V	J	3519223935	1	
C225	CeramicTubular	0.047	uF	50 V	Z	3519473935	1	
C226/C229	CeramicTubular	0.022	uF	50 V	J	3519223935	2	
C230	Electrolytic SG	100	pF	10 V	M	3479310121	1	
C231	Electrolytic SG	3.3	uF	50 V	M	3479333971	1	
C232	CeramicTubular	0.1	uF	50 V	Z	3519104935	1	
	CONNECTORS							
CN109	Wafer, FPC, 19P					4428519826	1	
CP201	Wafer, 6P					4428525560	1	
CP202	Wafer, FPC, 12P					4428527170	1	
CN201	Lead Ass'y, 6P					4358102184	1	
	INTEGRATED CIRCUITS							
IC201	CXD2515Q					2138022116	1	
IC202	BA6297					2168027202	1	
	TRANSISTOR							
Q201	2SD1302					2008610102	1	
	RESISTORS							
R200	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R201	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R202	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R203	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R204-R206	Carbon Film	15	kohm	1/5 W	J	3069153970	3	
R207/R208	Carbon Film	7.5	kohm	1/5 W	J	3069752970	2	
R209	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R210	Carbon Film	7.5	kohm	1/5 W	J	3069752970	1	
R211	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R213/R214	Carbon Film	68	kohm	1/5 W	J	3069683970	2	
R215	Carbon Film	7.5	kohm	1/5 W	J	3069752970	1	
R219	Metal Film	4.7	ohm	1/5 W	J	3029479970	1	
R220	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R221	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R222	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R223	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R224	Carbon Film	1	Mohm	1/5 W	J	3069105970	1	
R226	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R227	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R228/R230	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R231	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R232	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R233-R225	Metal Film	330	ohm	1/5 W	J	3029331970	3	
R236	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R237	Carbon Film	7.5	kohm	1/5 W	J	3069752970	1	
R238	Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R239	Carbon Film	7.5	kohm	1/5 W	J	3069752970	1	
R240	Carbon Film	4.7	kohm	1/5 W	J	3069472970	1	
PCB3	**ASSEMBLY PCB CNT**							
C301/C302	Capacitor, Mylar	0.0022	uF	100 V	J	3679222120	2	
C303	Capacitor, Electrolytic SG	47	uF	16 V	M	3479347031	1	
C304	Capacitor, Ceramic Tubular	0.047	uF	50 V	J	3519473935	1	
CP301	Connector, Wafer, 14P					4428517310	1	
20(CP302)	Connector, Wafer, 13P					4428513820	1	
D301/D302	Diode, 1N4148, Switching					2058322101	2	
Q301	Transistor, DTA114YS					2208222105	1	
Q302/Q303	Transistor, DTC323TS					2238422100	2	
Q304	Transistor, DTC114YS					2208622106	1	
R302/R303	Resistor, Metal Film	100	ohm	1/5 W	J	3029101970	2	
PCB4	**ASSEMBLY PCB FRONT 1**							
CN402	Connector, Lead Ass'y, 3P, 110mm					436103112632	1	
CP401	Connector, Wafer, 7P					4428525570	1	
15	Switch Tact					4658003710	10	
PCB5	**ASSEMBLY PCB FRONT 2**							
CN501	Connector, Lead Ass'y, 3P, 120mm					436103112632	1	
14	Switch Tact					4658004410	2	
PCB6	**ASSEMBLY PCB VIDEO JACK (VCDC757 ONLY)**							
C601	Capacitor, CeramicTubular	0.1	uF	50 V	Z	3519104935	1	
C602	Capacitor, Electrolytic SG	22	uF	16 V	M	3479322031	1	
CN601	Connector, Wafer, 2P					4428525520	1	
R601	Resistor, Metal Film	10	ohm	1/5 W	J	3029100970	1	
21	Jack RCA					4438113810	1	
PCB7	**ASSEMBLY PCB MPEG (VCDC757 ONLY)**							
	CAPACITORS							
C901/C902	Electrolytic SG	100	uF	10 V	M	3479310121	2	
C903-C905	Ceramic Chip	0.1	uF	50 V	J	3589104539	3	
C906	Not Used !							
C907-C909	Ceramic Chip	0.1	uF	50 V	J	3589104539	3	
C910	Not Used !						1	
C911	Ceramic Chip	0.1	uF	50 V	J	3589104539	1	
C912/C913	Ceramic Chip	15	pF	50 V		3589150139	2	
C914	Ceramic Chip	0.1	uF	50 V	J	3589104539	1	
C915	Not Used !							
C916-C923	Ceramic Chip	0.1	uF	50 V	J	3589104539	8	
C925/C926	Not Used !							
C927-C932	Ceramic Chip	0.1	uF	50 V	J	3589104539	6	
C933-C936	Not Used !							
C937/C938	Ceramic Chip	0.1	uF	50 V	J	3589104539	2	
C939	Electrolytic SG	470	uF	10 V		3479347121	1	
C941-C951	Ceramic Chip	0.1	uF	50 V	J	3589104539	11	
C952	Electrolytic SG	470	uF	10 V		3479347121	1	
C953	Ceramic Chip	0.1	uF	50 V	J	3589104539	1	
C954	Electrolytic Chip	10	uF	16 V		3478010031	1	
C955	Electrolytic SG	470	uF	10 V	M	3479347121	1	
C956	Not Used !							
C957	Ceramic Chip, CH	27	pF	50 V	J	3539270210	1	
C958	Ceramic Chip, CH	39	pF	50 V	J	3539390210	1	
TC901	Ceramic Chip	10	pF	50 V	J	3519100935	1	
V924	Electrolytic SG	100	uF	10 V	M	3479310121	1	
	CONNECTORS							
CP901	Wafer, 5P					4428516410	1	
CP902	Wafer, 5P					4428516410	1	
CP903	Wafer, 2P					4428508210	1	
CP904	Wafer, 6P					4428516510	1	
CN905	Lead Ass'y, 2P, 200mm					436202203782	1	
	RESISTORS							
R901-R906	Chip	10	kohm	1/8 W	J	3099103372	6	
R907	Chip	470	kohm	1/8 W	J	3099474870	1	
R908/R909	Chip	10	kohm	1/8 W	J	3099103372	2	
R910-R913	Chip	33	ohm	1/8 W	J	3099330372	4	
R916-R924	Chip	100	ohm	1/8 W	J	3099101170	9	
R925-R927	Chip	180	ohm	1/8 W	J	3099181870	3	
R928	Chip	47	kohm	1/8 W	J	3099473170	1	
R929	Chip	1	kohm	1/8 W	J	3099102170	1	
R930	Chip	75	ohm	1/8 W	J	3099750372	1	
R931	Chip	470	kohm	1/8 W	J	3099474870	1	
R932	Chip	10	ohm	1/8 W	J	3099100170	1	
R933	Not Used !							
R934	Chip	1	kohm	1/8 W	J	3099102372	1	
R935	Chip	10	kohm	1/8 W	J	3099103372	1	
R936	Chip	1	kohm	1/8 W	J	3099102372	1	
R937-R940	Chip	33	ohm	1/8 W	J	3099330372	4	
R941-R956	Chip	10	kohm	1/8 W	J	3099103372	6	
R957	Chip	33	ohm	1/8 W	J	3099330372	1	
R958	Chip	10	kohm	1/8 W	J	3099103372	1	
R959	Not Used !							
	INTEGRATED CIRCUITS							
U901	CXP82220-127Q					2138322205	1	
U902	KS9241B, CD-ROM Decoder					2139738001	1	
U903	HU62256ALJ					2139433000	1	
U904	STI3400DCV, MPEG V-Ecoder					2138535002	1	
U905	HY514260BJC-70, DRAM					2139433002	1	
U906	STI4510ACV, MPEG A-Ecoder					2138035004	1	
U908	CDVS110-ABYA, DATA-CTRL					2138535001	1	
U909A	GD74HC04D					2139036000	1	
U912	STV8438CV, DA-Converter					2138535003	1	
U913A/B	Not Used !							
U913C	GD74HC04D					2138036000	1	
U913D	GD74HC04D					2138036000	1	
U914	HY534256AJ-70, DRAM					2139433001	1	
U914	CXA1645N-T6, RGB Decoder					2139722001	1	
	MISCELLANEOUS							
U910	Crystal, OSC, 5 0 MHz					3938213002	1	
U911	Crystal, OSC, 13.5 MHz					3938213001	1	
XT901	Resonator, 10 MHz					3938131750	1	
XT902	Crystal, 24 MHz					3908101330	1	
XT903	Crystal, 3.579545 MHz					3938201988	1	

IC FUNCTIONAL BLOCK DIAGRAM

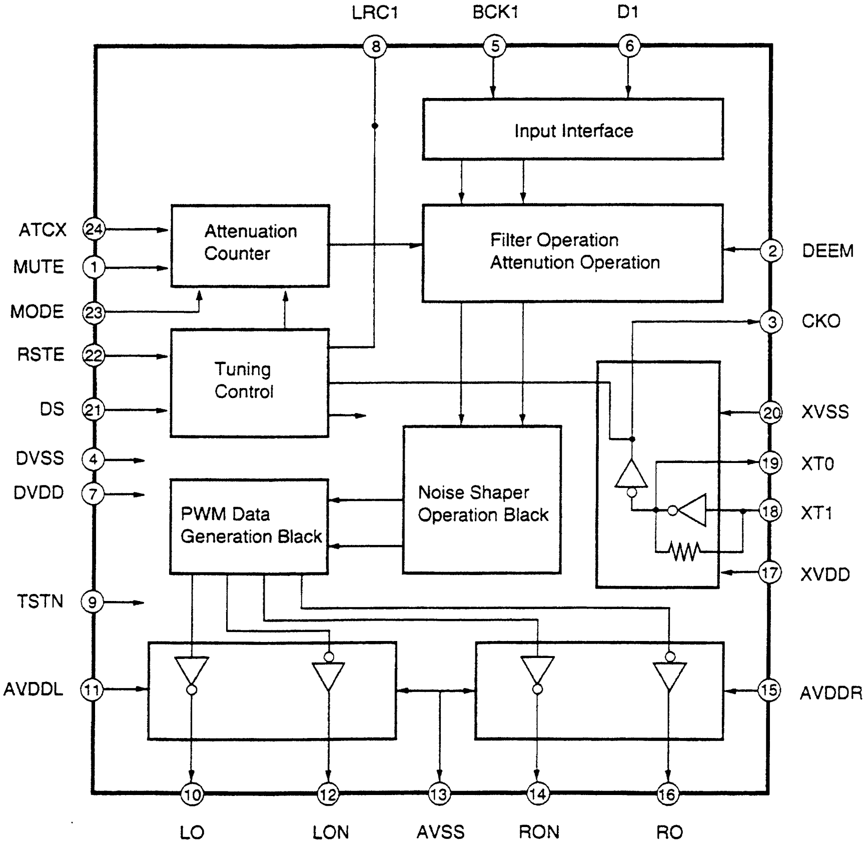
IC102 : GD74HC157


SELECT
1
SE
ST
15
1A
2
1B
3
2A
5
2B
6
3A
11
3B
10
4A
4B
13
4
1Y
7
2Y
9
3Y
12
4Y
Φ

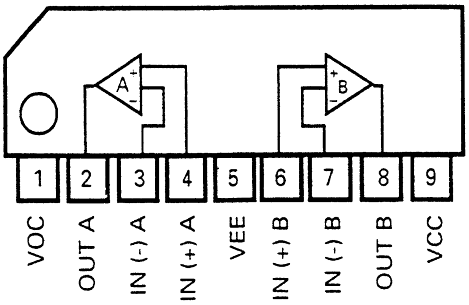
IC108 : KA7805


INPUT
1
THERMAL SHUT DOWN
START-UP CIRCUIT
CURRENT LIMLTER & PROTECTOR
ERROR AMP
Vret
3
OUTPUT
2
GND

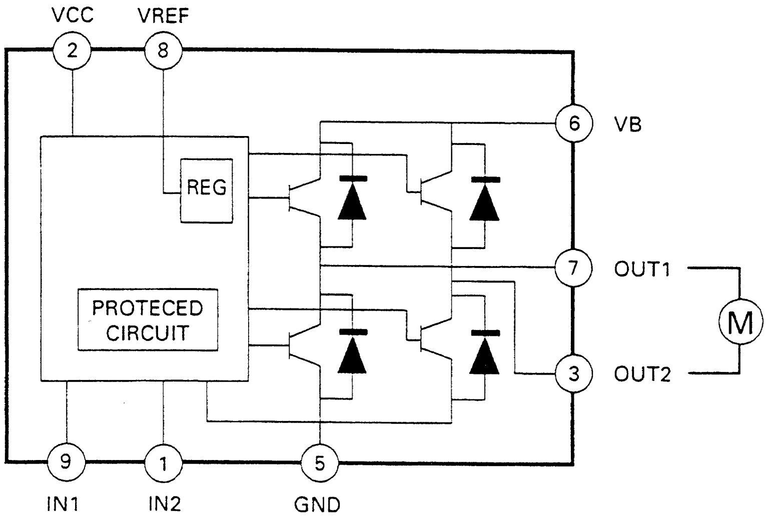
IC103 : SM5874AM


LRC1
BCK1
D1
8
5
6
Input Interface
ATCX
24
MUTE
1
MODE
23
RSTE
22
DS
21
DVSS
4
DVDD
7
TSTN
9
AVDDL
11
Attenuation Counter
Filter Operation Attenution Operation
Tuning Control
Noise Shaper Operation Black
PWM Data Generation Black
DEEM
2
CKO
3
XVSS
20
XT0
19
XT1
18
XVDD
17
AVDDR
15
10
LO
12
LON
13
AVSS
14
RON
16
RO

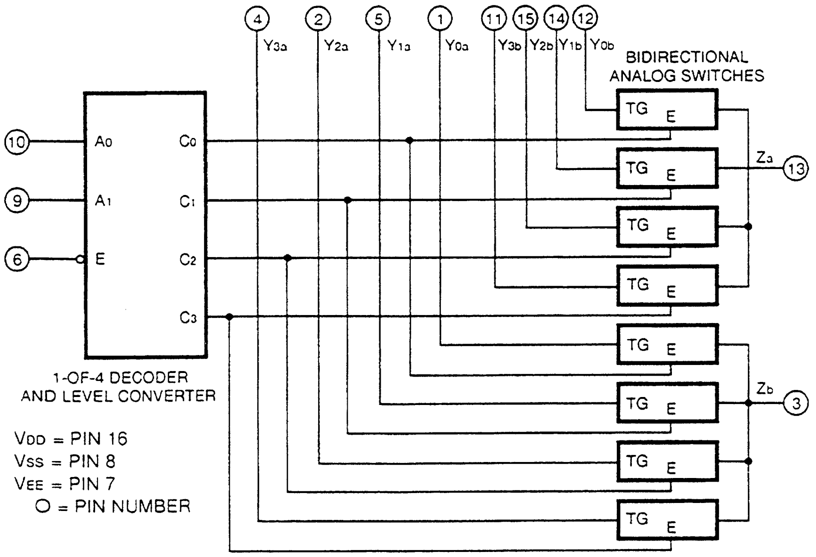
IC104/IC105
: KIA4559S/KIA75559S


A
B
1
2
3
4
5
6
7
8
9
VOC
OUT A
IN (-) A
IN (+) A
VEE
IN (+) B
IN (-) B
OUT B
VCC

IC107 : TA7291S


VCC
VREF
2
8
6
VB
REG
PROTECED CIRCUIT
7
OUT1
M
3
OUT2
9
1
5
IN1
IN2
GND

IC106 : NJM4052 BCF

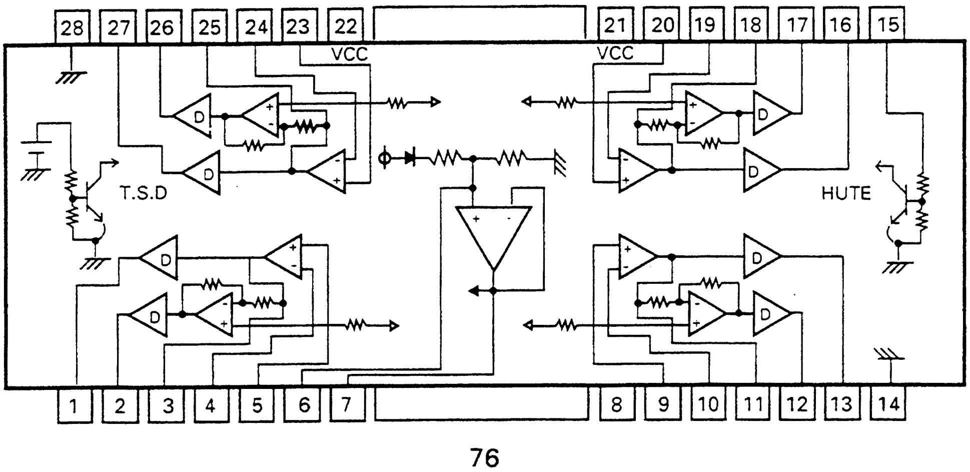

4
2
5
1
11
15
14
12
Y3a
Y2a
Y1a
Y0a
Y3b
Y2b
Y1b
Y0b
BIDIRECTIONAL ANALOG SWITCHES
10
A0
C0
9
A1
C1
6
E
C2
C3
TG
E
Za
13
Zb
3
1-OF-4 DECODER AND LEVEL CONVERTER

VDD = PIN 16
VSS = PIN 8
VEE = PIN 7
O = PIN NUMBER

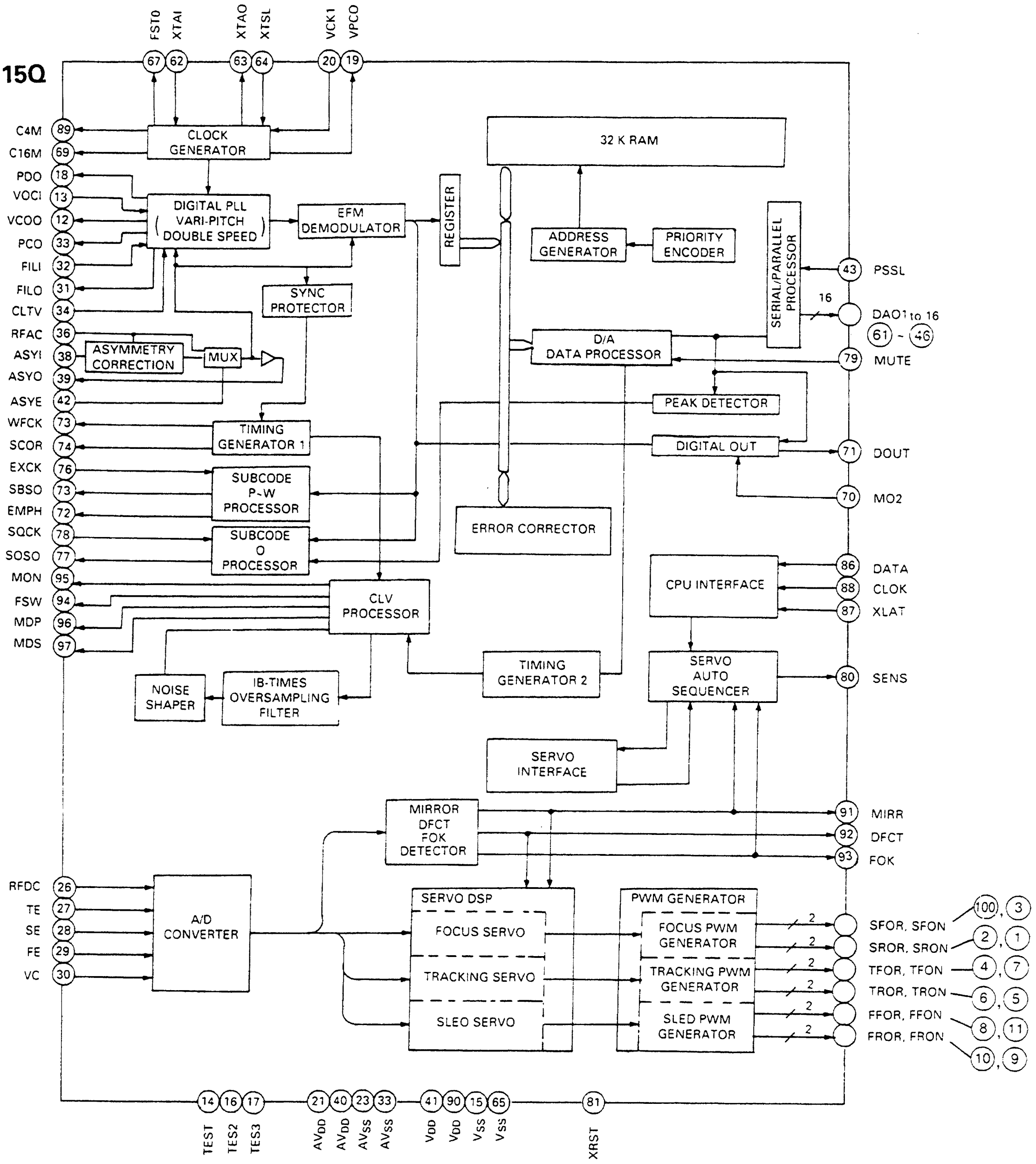
TRUTH TABLE

INPUT			CHANNELS			
E	A_1	A_0	Y_0 - Z	Y_1 - Z	Y_2 - Z	Y_3 - Z
L	L	L	ON	OFF	OFF	OFF
L	L	H	OFF	ON	OFF	OFF
L	H	L	ON	OFF	ON	OFF
L	H	H	ON	OFF	OFF	ON
H	X	X	ON	OFF	OFF	OFF

IC202 : BA6297

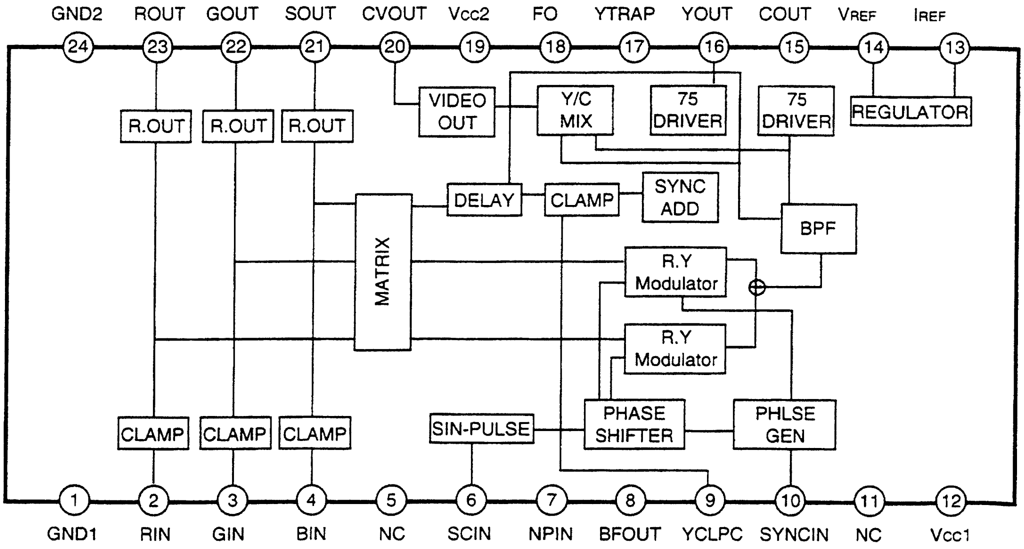

28
27
26
25
24
23
22
21
20
19
18
17
16
15
VCC
VCC
D
T.S.D
HUTE
1
2
3
4
5
6
7
8
9
10
11
12
13
14

IC201 : CXD2515Q

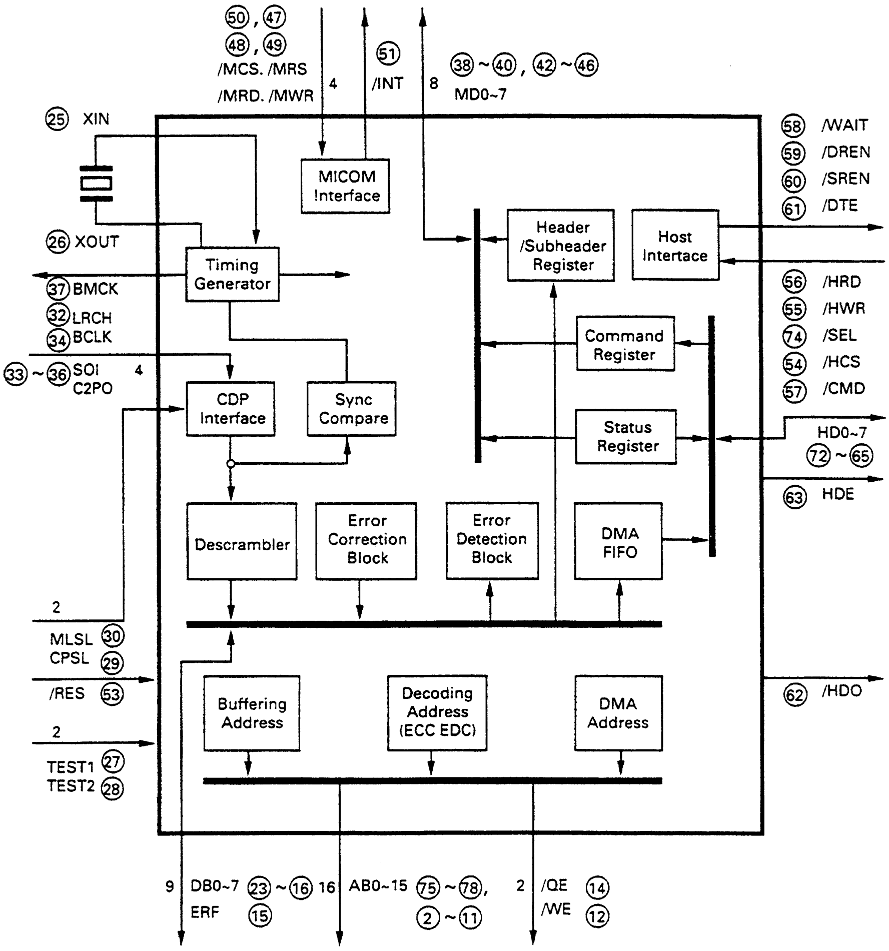

FST0
XTAI
XTAO
XTSL
VCK1
VPCO
67
62
63
64
20
19
C4M 89
C16M 69
PDO 18
VOCI 13
VCOO 12
PCO 33
FILI 32
FILO 31
CLTV 34
RFAC 36
ASYI 38
ASYO 39
ASYE 42
WFCK 73
SCOR 74
EXCK 76
SBSO 73
EMPH 72
SQCK 78
SOSO 77
MON 95
FSW 94
MDP 96
MDS 97
CLOCK GENERATOR
DIGITAL PLL (VARI-PITCH DOUBLE SPEED)
EFM DEMODULATOR
SYNC PROTECTOR
ASYMMETRY CORRECTION
MUX
TIMING GENERATOR 1
SUBCODE P-W PROCESSOR
SUBCODE Q PROCESSOR
CLV PROCESSOR
NOISE SHAPER
IB-TIMES OVERSAMPLING FILTER
REGISTER
32 K RAM
ADDRESS GENERATOR
PRIORITY ENCODER
SERIAL/PARALLEL PROCESSOR
16
D/A DATA PROCESSOR
PEAK DETECTOR
DIGITAL OUT
ERROR CORRECTOR
CPU INTERFACE
TIMING GENERATOR 2
SERVO AUTO SEQUENCER
SERVO INTERFACE
MIRROR DFCT FOK DETECTOR
43 PSSL
DAO1 to 16
61 - 46
79 MUTE
71 DOUT
70 MO2
86 DATA
88 CLOK
87 XLAT
80 SENS
91 MIRR
92 DFCT
93 FOK
RFDC 26
TE 27
SE 28
FE 29
VC 30
A/D CONVERTER
SERVO DSP
FOCUS SERVO
TRACKING SERVO
SLED SERVO
PWM GENERATOR
FOCUS PWM GENERATOR
TRACKING PWM GENERATOR
SLED PWM GENERATOR
2
SFOR, SFON 100, 3
SROR, SRON 2, 1
TFOR, TFON 4, 7
TROR, TRON 6, 5
FFOR, FFON 8, 11
FROR, FRON 10, 9
14 16 17
21 40 23 33
41 90 15 65
81
TEST
TES2
TES3
AVDD
AVDD
AVSS
AVSS
VDD
VDD
VSS
VSS
XRST

MPEG PART

U914 : CXD1645N - T6

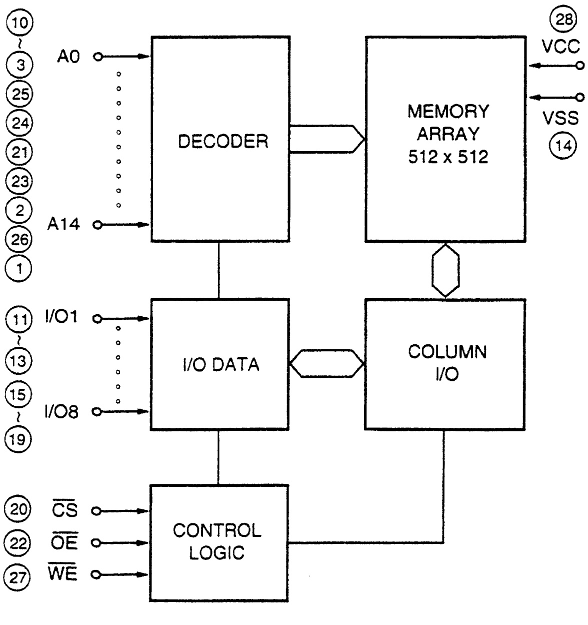

GND2 24
ROUT 23
GOUT 22
SOUT 21
CVOUT 20
Vcc2 19
FO 18
YTRAP 17
YOUT 16
COUT 15
VREF 14
IREF 13
R.OUT
R.OUT
R.OUT
VIDEO OUT
Y/C MIX
75 DRIVER
75 DRIVER
REGULATOR
DELAY
CLAMP
SYNC ADD
BPF
MATRIX
R.Y Modulator
R.Y Modulator
CLAMP
CLAMP
CLAMP
SIN-PULSE
PHASE SHIFTER
PHLSE GEN
1 GND1
2 RIN
3 GIN
4 BIN
5 NC
6 SCIN
7 NPIN
8 BFOUT
9 YCLPC
10 SYNCIN
11 NC
12 Vcc1

U902 : KS9241B



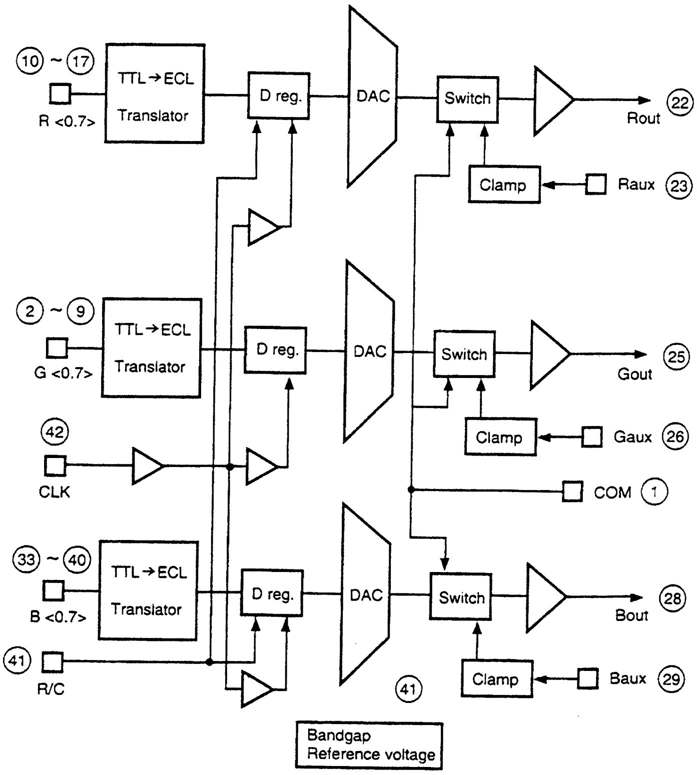
(50), (47)
(48), (49)
/MCS. /MRS
/MRD. /MWR
4
(51)
/INT
8
(38)~(40), (42)~(46)
MD0~7
(25) XIN
(26) XOUT
(37) BMCK
(32) LRCH
(34) BCLK
(33)~(36) SOI
C2PO
4
MICOM Interface
Timing Generator
CDP Interface
Sync Compare
Header /Subheader Register
Host Interface
Command Register
Status Register
Descrambler
Error Correction Block
Error Detection Block
DMA FIFO
Buffering Address
Decoding Address (ECC EDC)
DMA Address
2
MLSL (30)
CPSL (29)
/RES (53)
2
TEST1 (27)
TEST2 (28)
(58) /WAIT
(59) /DREN
(60) /SREN
(61) /DTE
(56) /HRD
(55) /HWR
(74) /SEL
(54) /HCS
(57) /CMD
HD0~7
(72)~(65)
(63) HDE
(62) /HDO
9 DB0~7 (23)~(16)
ERF (15)
16 AB0~15 (75)~(78),
(2)~(11)
2 /OE (14)
/WE (12)

U903 : HY62256ALJ



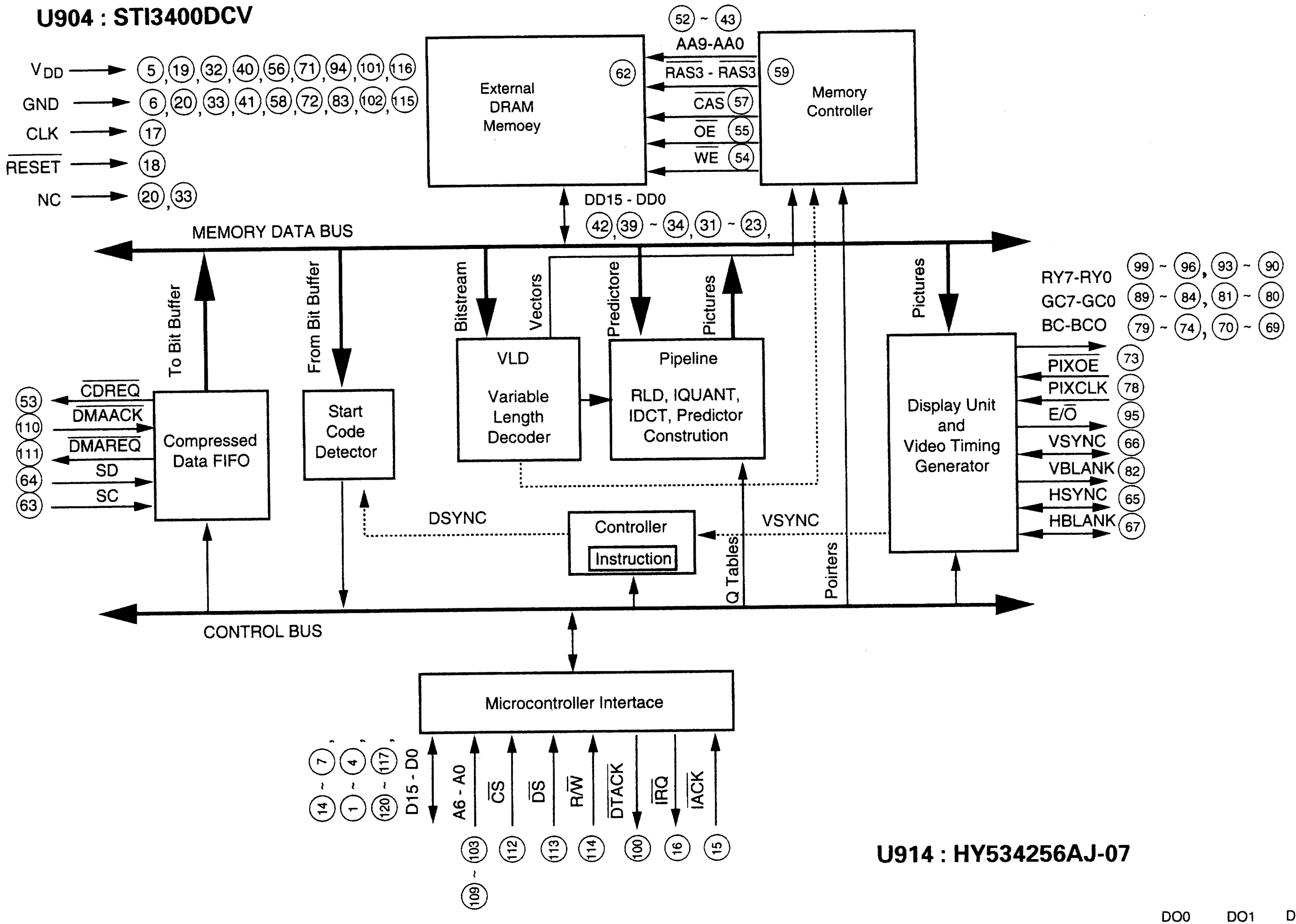
(10) ~ (3) (25) (24) (21) (23) (2) (26) (1)
A0
A14
(11) ~ (13) (15) ~ (19)
I/O1
I/O8
(20) CS
(22) OE
(27) WE
DECODER
MEMORY ARRAY 512 x 512
I/O DATA
COLUMN I/O
CONTROL LOGIC
(28) VCC
VSS (14)

U912 : STV8438CV



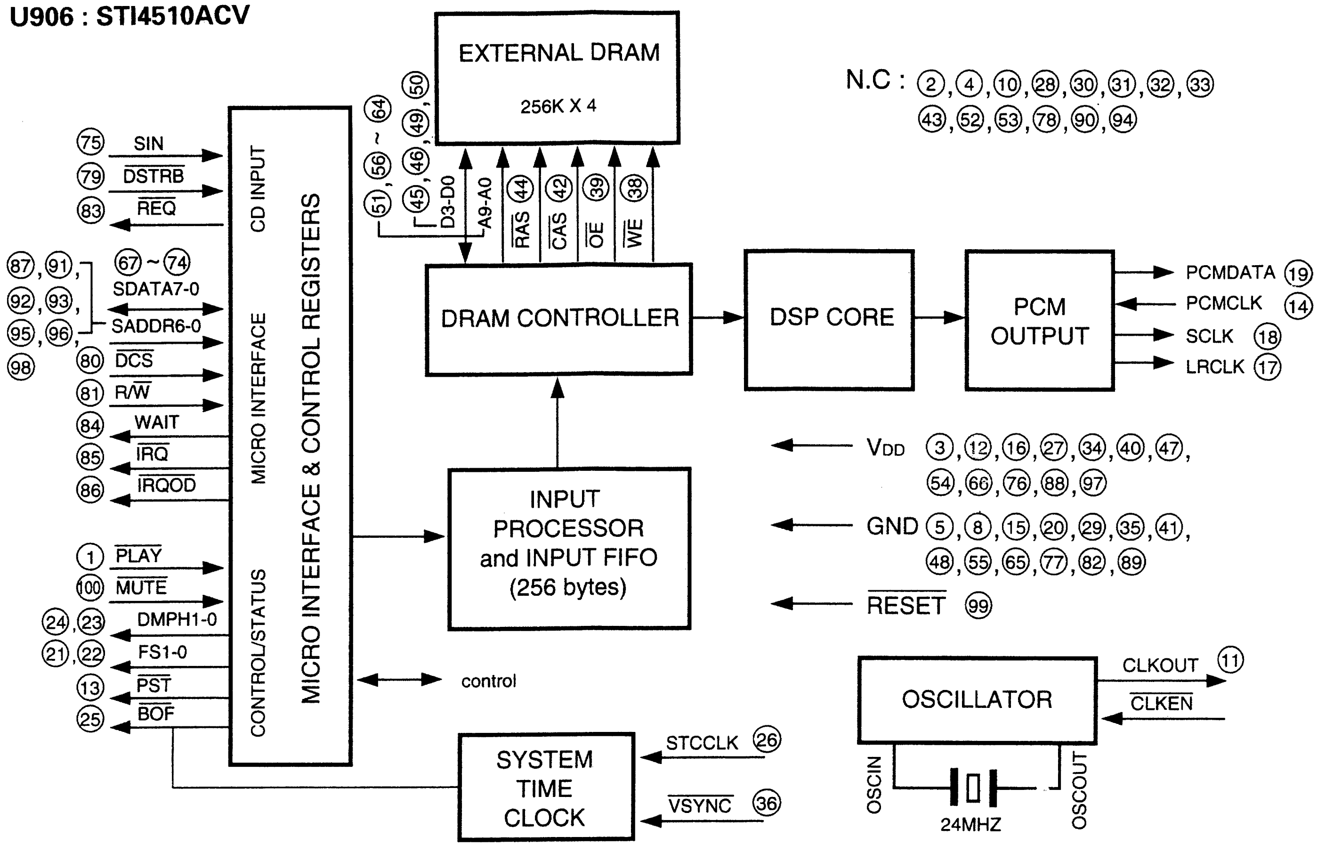
(10)~(17)
R <0.7>
TTL→ECL Translator
D reg.
DAC
Switch
Clamp
Rout (22)
Raux (23)
(2)~(9)
G <0.7>
Gout (25)
Gaux (26)
(42)
CLK
COM (1)
(33)~(40)
B <0.7>
Bout (28)
Baux (29)
(41)
R/C
(41)
Bandgap Reference voltage

U904 : STI3400DCV



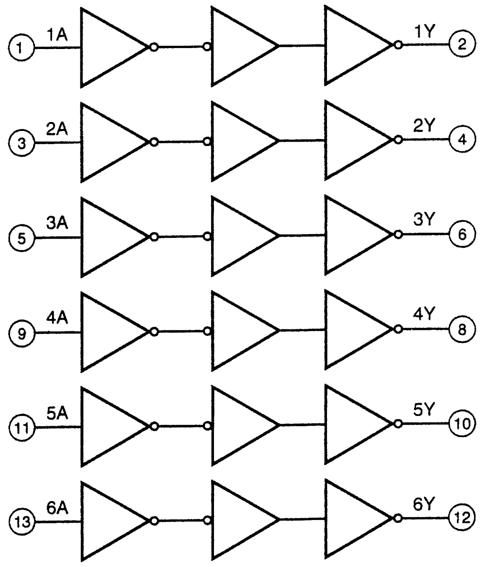
VDD ⑤,⑲,㉜,㊵,(56),(71),(94),(101),(116)
GND ⑥,⑳,㉝,㊶,(58),(72),(83),(102),(115)
CLK ⑰
RESET ⑱
NC ⑳,㉝
External DRAM Memoey
(62)
(52) ~ ㊸
AA9-AA0
RAS3 - RAS3
(59)
CAS (57)
OE (55)
WE (54)
Memory Controller
DD15 - DD0
㊷,㊴ ~ ㉞,㉛ ~ ㉓,
MEMORY DATA BUS
To Bit Buffer
From Bit Buffer
Bitstream
Vectors
Predictore
Pictures
Pictures
VLD
Variable Length Decoder
Pipeline
RLD, IQUANT, IDCT, Predictor Construction
Display Unit and Video Timing Generator
RY7-RY0 (99) ~ (96), (93) ~ (90)
GC7-GC0 (89) ~ (84), (81) ~ (80)
BC-BCO (79) ~ (74), (70) ~ (69)
PIXOE (73)
PIXCLK (78)
E/O (95)
VSYNC (66)
VBLANK (82)
HSYNC (65)
HBLANK (67)
CDREQ (53)
DMAACK (110)
DMAREQ (111)
SD (64)
SC (63)
Compressed Data FIFO
Start Code Detector
DSYNC
Controller
Instruction
VSYNC
Q Tables
Pointers
CONTROL BUS
Microcontroller Intertace
⑭ - ⑦, ① - ④, (120) - (117)
D15 - D0
A6 - A0
CS
DS
R/W
DTACK
IRQ
IACK
(103) ~ (109)
(112)
(113)
(114)
(100)
⑯
⑮

U906 : STI4510ACV



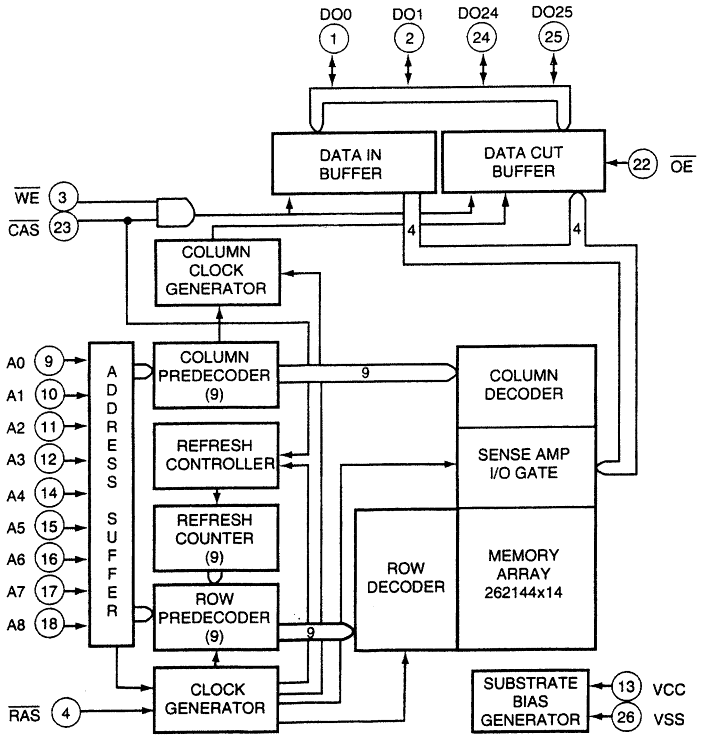
EXTERNAL DRAM
256K X 4
N.C : ②,④,⑩,㉘,㉚,㉛,㉜,㉝
㊸,(52),(53),(78),(90),(94)
(75) SIN
(79) DSTRB
(83) REQ
(87),(91), (92),(93), (95),(96), (98)
(67) ~ (74)
SDATA7-0
SADDR6-0
(80) DCS
(81) R/W
(84) WAIT
(85) IRQ
(86) IRQOD
① PLAY
(100) MUTE
㉔,㉓ DMPH1-0
㉑,㉒ FS1-0
⑬ PST
㉕ BOF
CD INPUT
MICRO INTERFACE
CONTROL/STATUS
MICRO INTERFACE & CONTROL REGISTERS
(51),(56) ~ (64)
㊺,㊻,㊾,(50)
D3-D0
A9-A0
RAS ㊹
CAS ㊷
OE ㊴
WE ㊳
DRAM CONTROLLER
DSP CORE
PCM OUTPUT
PCMDATA ⑲
PCMCLK ⑭
SCLK ⑱
LRCLK ⑰
INPUT PROCESSOR and INPUT FIFO (256 bytes)
VDD ③,⑫,⑯,㉗,㉞,㊵,㊼,
(54),(66),(76),(88),(97)
GND ⑤,⑧,⑮,⑳,㉙,㉟,㊶,
㊽,(55),(65),(77),(82),(89)
RESET (99)
control
SYSTEM TIME CLOCK
STCCLK ㉖
VSYNC ㊱
OSCILLATOR
CLKOUT ⑪
CLKEN
OSCIN
OSCOUT
24MHZ

U909A/U913C/U913D
: GD74HC04D



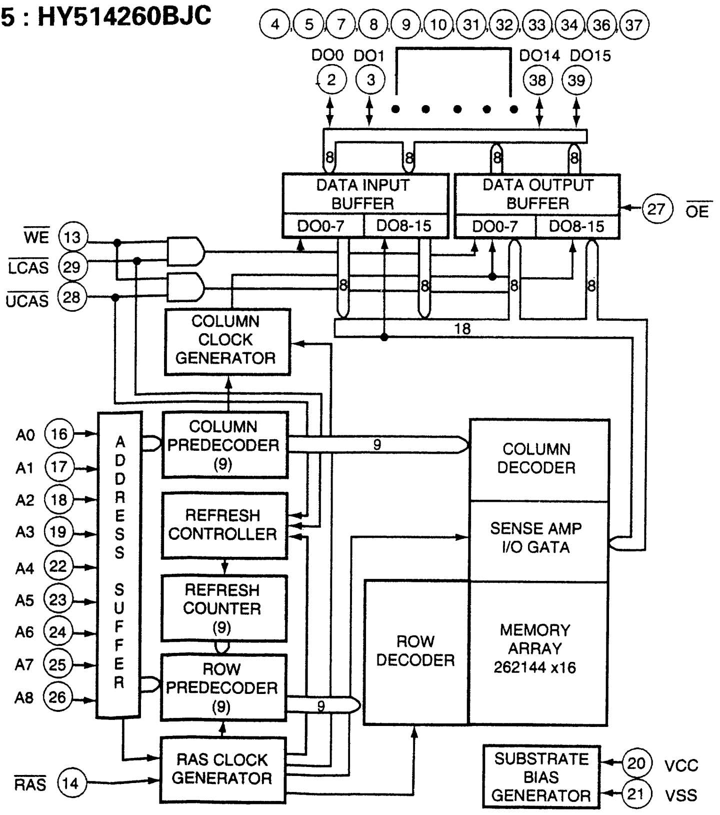
① 1A
1Y ②
③ 2A
2Y ④
⑤ 3A
3Y ⑥
⑨ 4A
4Y ⑧
⑪ 5A
5Y ⑩
⑬ 6A
6Y ⑫

U914 : HY534256AJ-07



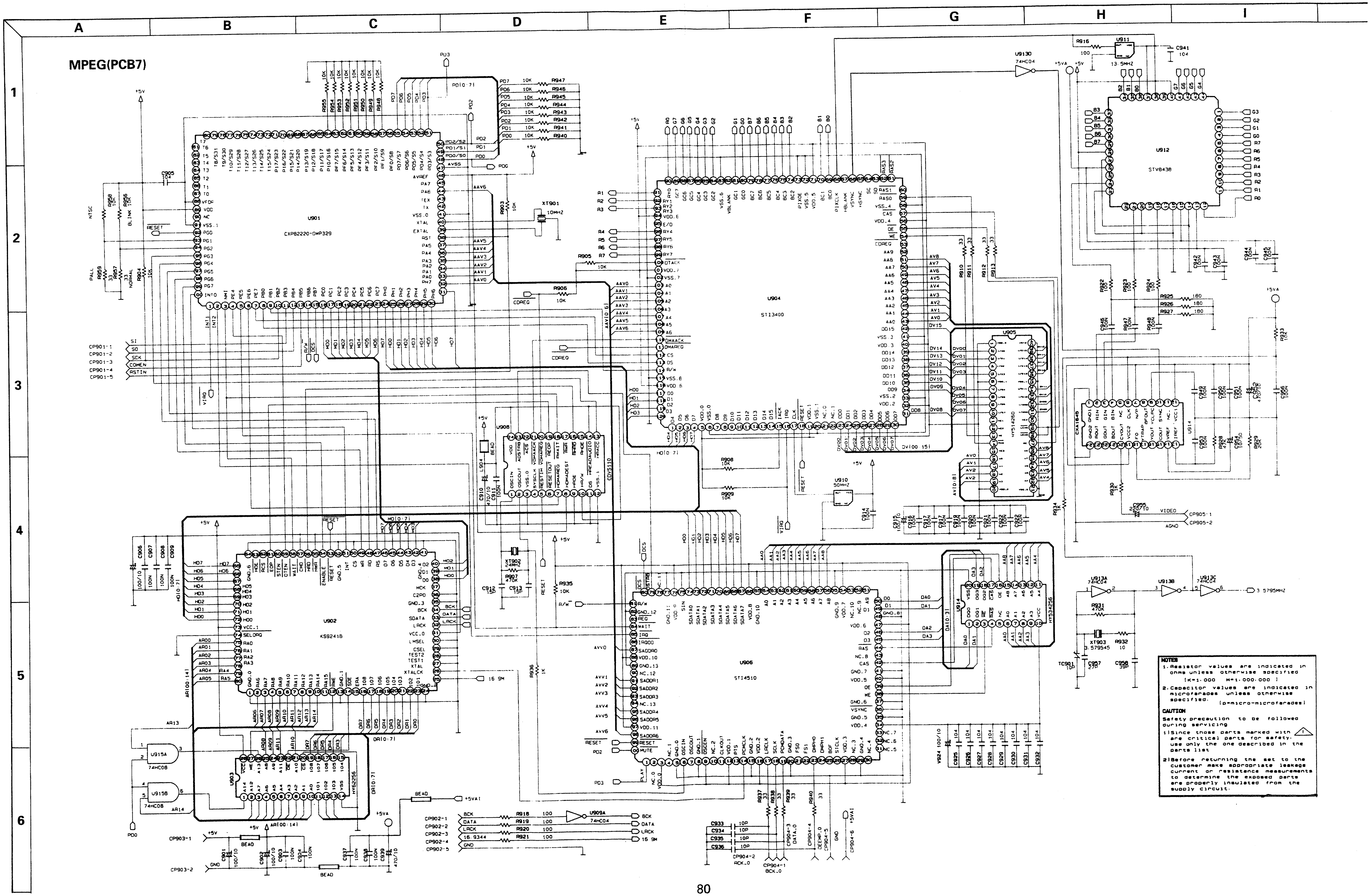
DO0 ①
DO1 ②
DO24 ㉔
DO25 ㉕
DATA IN BUFFER
DATA CUT BUFFER
㉒ OE
WE ③
CAS ㉓
4
4
COLUMN CLOCK GENERATOR
A0 ⑨
A1 ⑩
A2 ⑪
A3 ⑫
A4 ⑭
A5 ⑮
A6 ⑯
A7 ⑰
A8 ⑱
ADDRESS SUFFER
COLUMN PREDECODER (9)
9
COLUMN DECODER
REFRESH CONTROLLER
SENSE AMP I/O GATE
REFRESH COUNTER (9)
ROW PREDECODER (9)
9
ROW DECODER
MEMORY ARRAY 262144x14
CLOCK GENERATOR
RAS ④
SUBSTRATE BIAS GENERATOR
⑬ VCC
㉖ VSS

U905 : HY514260BJC



④⑤⑦⑧⑨⑩㉛㉜㉝㉞㊱㊲
DO0 DO1 ② ③
DO14 DO15 ㊳ ㊴
8 8 8 8
DATA INPUT BUFFER
DO0-7 DO8-15
DATA OUTPUT BUFFER
DO0-7 DO8-15
㉗ OE
WE ⑬
LCAS ㉙
UCAS ㉘
8 8 8 8
18
COLUMN CLOCK GENERATOR
A0 ⑯
A1 ⑰
A2 ⑱
A3 ⑲
A4 ㉒
A5 ㉓
A6 ㉔
A7 ㉕
A8 ㉖
ADDRESS SUFFER
COLUMN PREDECODER (9)
9
COLUMN DECODER
REFRESH CONTROLLER
SENSE AMP I/O GATA
REFRESH COUNTER (9)
ROW PREDECODER (9)
9
ROW DECODER
MEMORY ARRAY 262144 x16
RAS ⑭
RAS CLOCK GENERATOR
SUBSTRATE BIAS GENERATOR
⑳ VCC
㉑ VSS

SCHEMATIC DIAGRAM I


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
MPEG(PCB7)
U901
CXP82220-0##P329
U902
KS9241B
U903
HY62256
U904
STI3400
U905
HY514260
U906
STI4510
U908
CDVS110
U909A
74HC04
U910
50MHZ
U911
13.5MHZ
U912
STV8438
U913A
74HC04
U913B
U913C
U9130
U914
CXA1645
U915A
74HC08
U915B
74HC08
XT901
10MHZ
XT902
XT903
3.579545
HY534256
CP901-1
CP901-2
CP901-3
CP901-4
CP901-5
SI
SO
SCK
COMEN
RSTIN
CP902-1
CP902-2
CP902-3
CP902-4
CP902-5
BCK
DATA
LRCK
16.9344
GND
CP903-1
CP903-2
CP904-1
CP904-2
CP904-3
CP904-4
CP904-5
CP904-6
CP905-1
CP905-2
VIDEO
AGND
3.5795MHZ
16.9M
+5V
+5VA
+5VAI
BEAD
RESET
NTSC
PALL
NORMAL
BLINK
CDREQ
DCS
PD0
PD3

NOTES

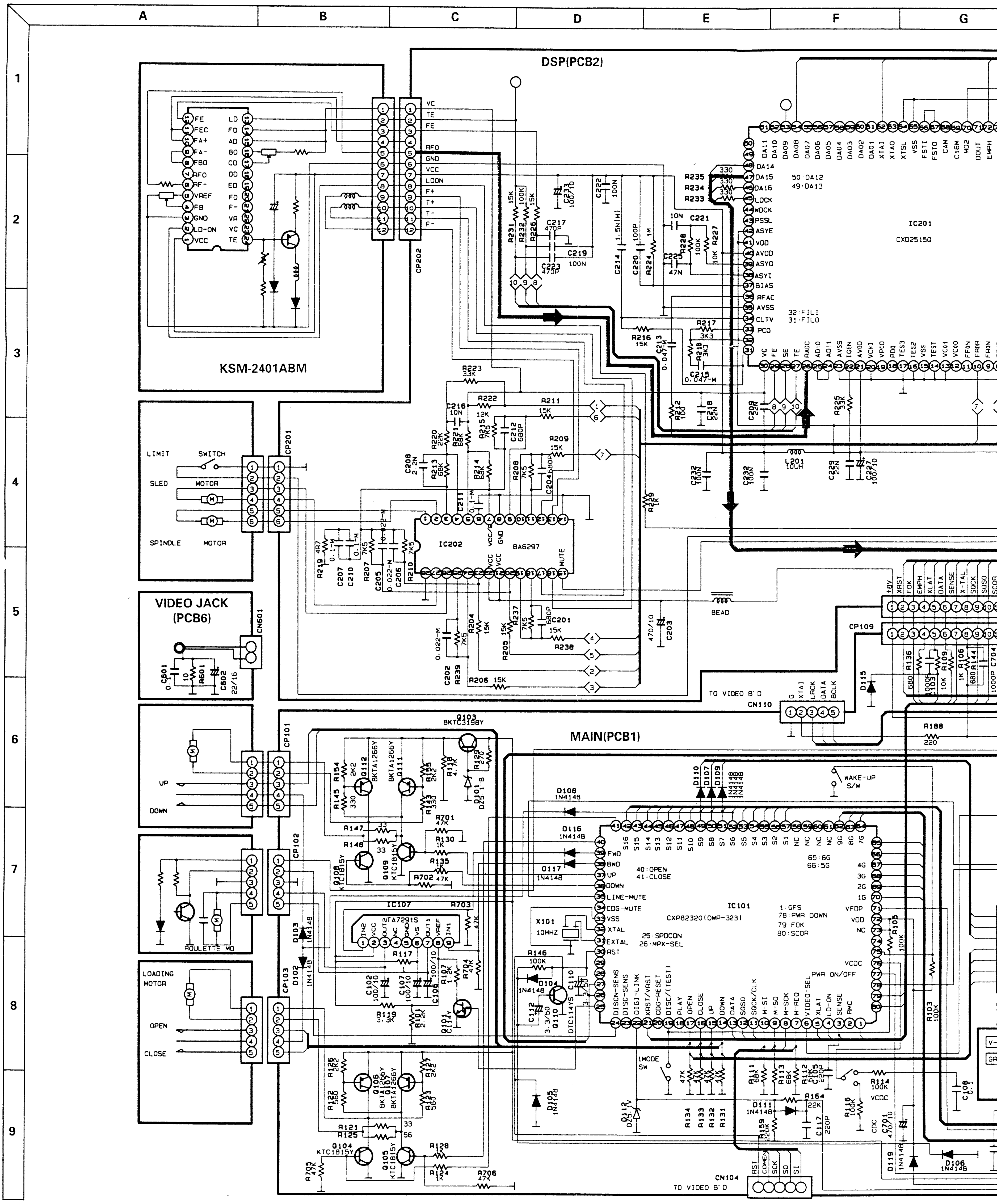
1. Resistor values are indicated in ohms unless otherwise specified (K=1.000 M=1.000.000)
2. Capacitor values are indicated in microfarades unless otherwise specified. (p=micro-microfarades)

CAUTION

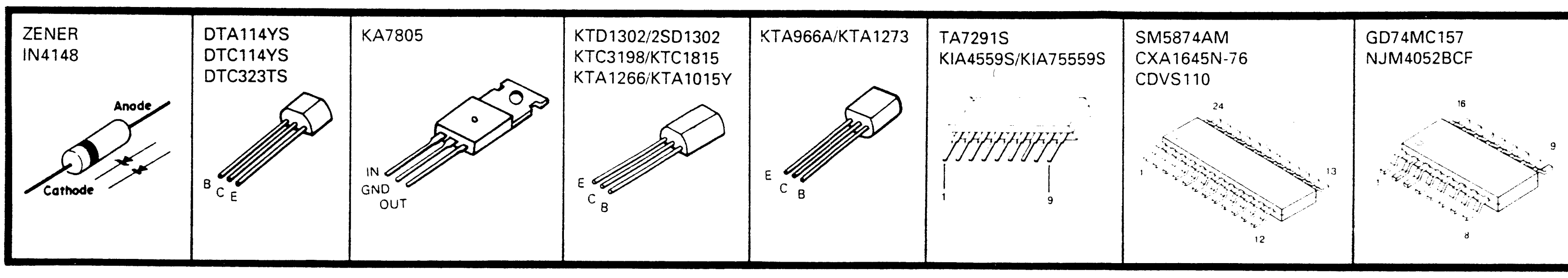
Safety precaution to be followed during servicing

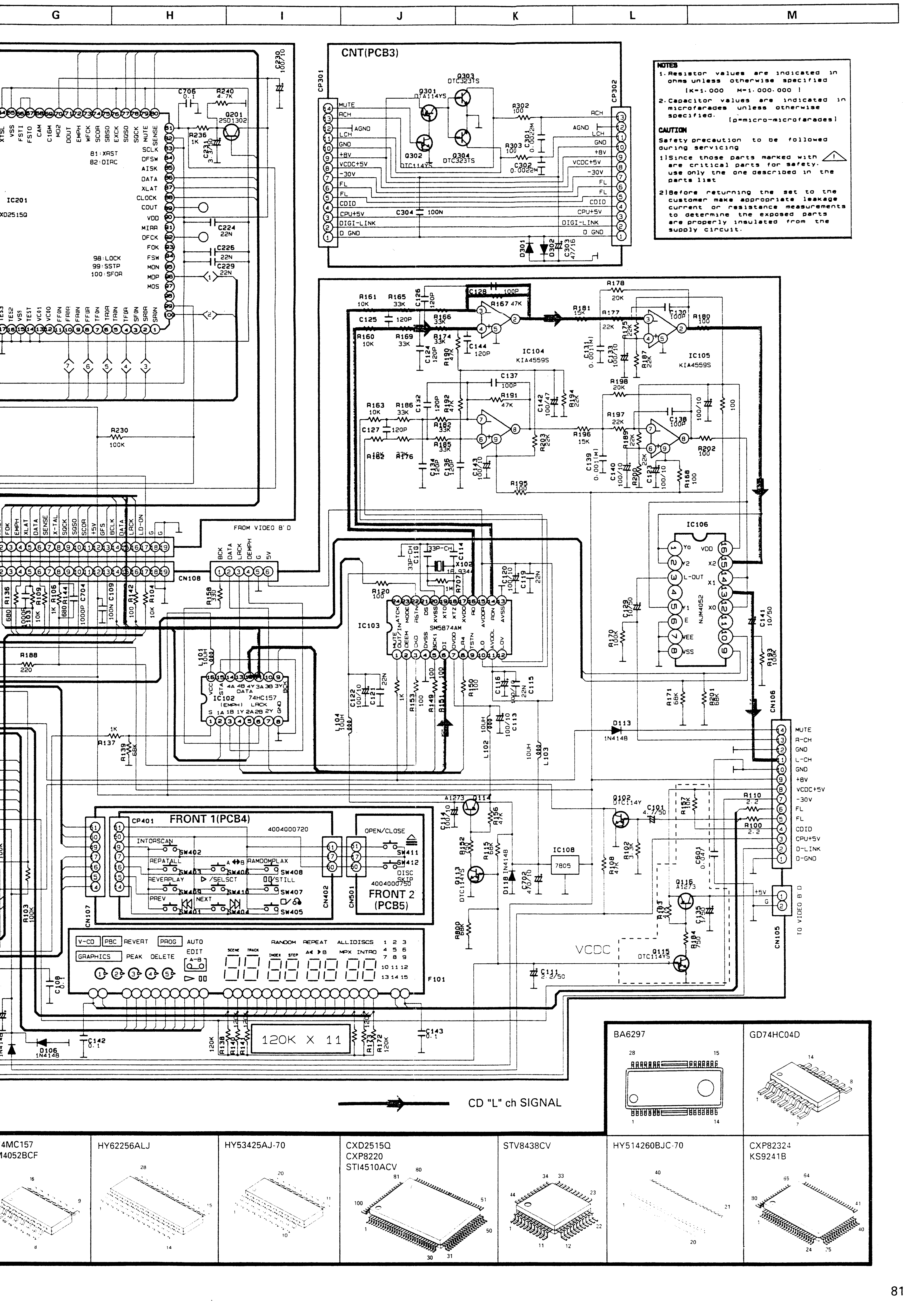
1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

SCHEMATIC DIAGRAM II


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
DSP(PCB2)
KSM-2401ABM
CP202
CP201
LIMIT
SWITCH
SLED
MOTOR
SPINDLE
MOTOR
VIDEO JACK (PCB6)
CN601
IC202
BA6297
IC201
CXD2515Q
BEAD
CP109
TO VIDEO B'D
CN110
MAIN(PCB1)
CP101
UP
DOWN
CP102
ROULETTE MO
CP103
LOADING MOTOR
OPEN
CLOSE
IC107
TA7291S
IC101
CXP82320(DWP-323)
X101
10MHZ
WAKE-UP S/W
MODE SW
CN104
TO VIDEO B'D
Q103 BKTC3198Y
Q112 BKTA1266Y
Q111 BKTA1266Y
Q108 KTC1815Y
Q109 KTC1815Y
Q104 KTC1815Y
Q105 KTC1815Y
Q106 BKTA1266Y
Q107 BKTA1266Y
Q101 DTC114Y
Q110 DTC114YS
D101 DZ5.1-B
D108 1N4148
D116 1N4148
D117 1N4148
D104 1N4148
D105 1N4148
D111 1N4148
D106 1N4148
D119 1N4148
D115
D112
D110 D107 D109 1N4148
D102 1N4148
D103 1N4148
40:OPEN
41:CLOSE
25:SPDCON
26:MPX-SEL
1:GFS
78:PWR DOWN
79:FOK
80:SCOR
65:6G
66:5G
50:DA12
49:DA13
32:FILI
31:FILO

PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.


ZENER
IN4148
Anode
Cathode
DTA114YS
DTC114YS
DTC323TS
B
C
E
KA7805
IN
GND
OUT
KTD1302/2SD1302
KTC3198/KTC1815
KTA1266/KTA1015Y
E
C
B
KTA966A/KTA1273
E
C
B
TA7291S
KIA4559S/KIA75559S
1
9
SM5874AM
CXA1645N-76
CDVS110
24
1
13
12
GD74MC157
NJM4052BCF
16
9
8


G
H
I
J
K
L
M
CNT(PCB3)
CP301
CP302
Q301 DTA114YS
Q302 DTC114YS
Q303 DTC323TS
Q304 DTC323TS
MUTE
RCH
AGND
LCH
GND
+8V
VCDC+5V
-30V
FL
CDIO
CPU+5V
DIGI-LINK
D GND
C304 100N
IC201
81:XRST
82:DIRC
98:LOCK
99:SSTP
100:SFOR
IC104 KIA4559S
IC105 KIA4559S
IC106 NJM4052
IC103 SM5874AM
IC102 74HC157
IC108 7805
CN108
FROM VIDEO 8'D
CN106
CN105
TO VIDEO 8 D
CP401
FRONT 1(PCB4)
4004000720
INTORSCAN
REPATALL
REVERPLAY
PREV
NEXT
RAMDOMPLAX
/SELSCT
STILL
SW402
SW403
SW406
SW408
SW409
SW410
SW407
SW401
SW404
SW405
OPEN/CLOSE
SW411
SW412
DISC SKIP
4004000750
FRONT 2 (PCB5)
CN107
CN402
CN501
V-CD
PBC
REVERT
PROG
AUTO
GRAPHICS
PEAK
DELETE
EDIT
RANDOM
REPEAT
ALLIDISCS
MPX
INTRO
F101
120K X 11
VCDC
CD "L" ch SIGNAL
BA6297
GD74HC04D
4MC157
M4052BCF
HY62256ALJ
HY53425AJ-70
CXD2515Q
CXP8220
STI4510ACV
STV8438CV
HY514260BJC-70
CXP82324
KS9241B

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
   (K=1.000 M=1.000.000)
2. Capacitor values are indicated in microfarades unless otherwise specified. (p=micro-microfarades)

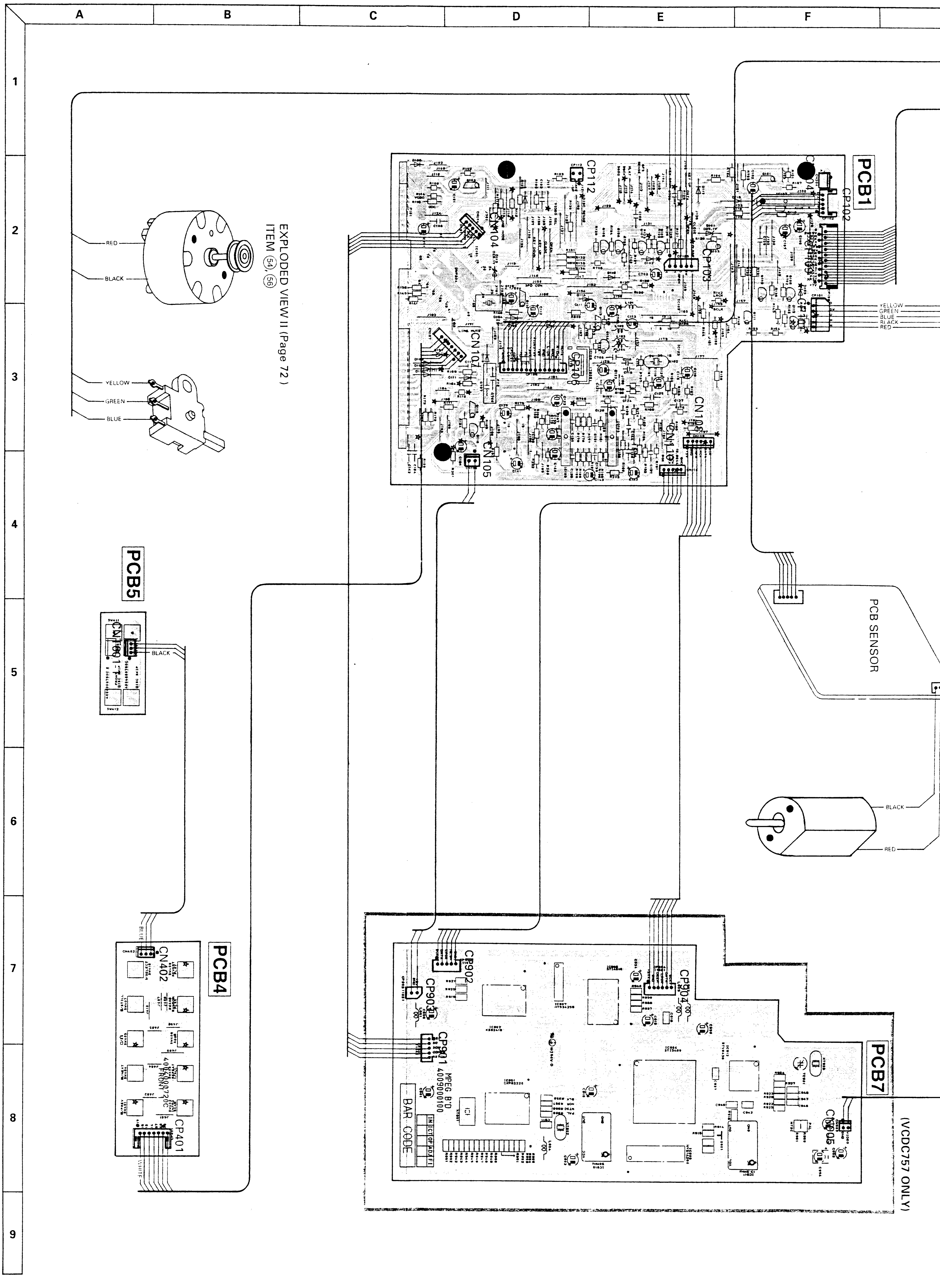
CAUTION

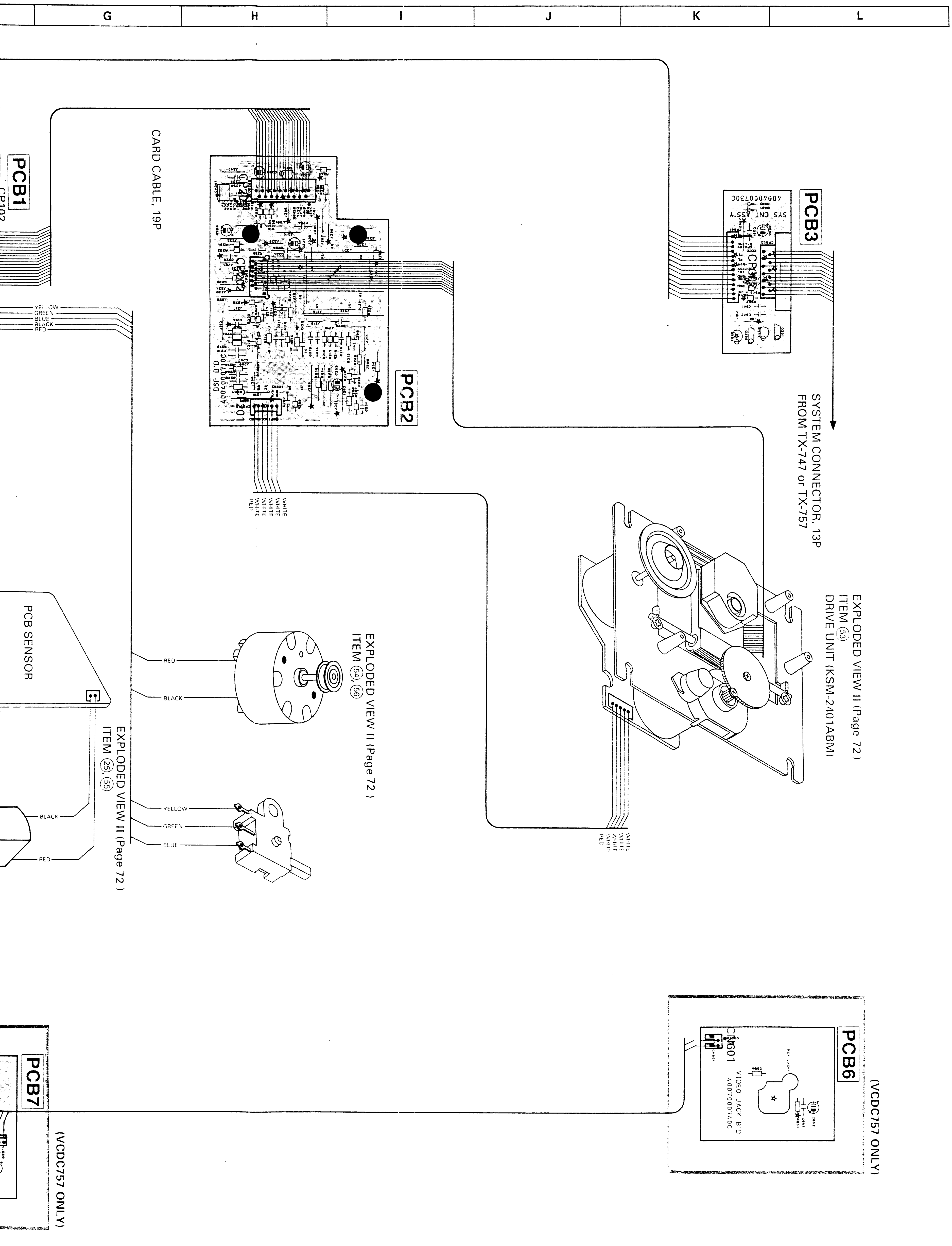
Safety precaution to be followed during servicing

1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list

2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

WIRING DIAGRAM


A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
PCB1
CP102
CP112
CN104
CP103
CN107
CP108
CN109
CN110
CN105
CP101
EXPLODED VIEW II (Page 72)
ITEM (54), (56)
RED
BLACK
YELLOW
GREEN
BLUE
YELLOW
GREEN
BLUE
BLACK
RED
PCB SENSOR
BLACK
RED
PCB5
BLACK
PCB4
CN402
CP401
BLUE
WHITE
PCB7
CP902
CP903
CP901
MPEG B'D
4009000100
BAR CODE
CP904
CN905
(VCDC757 ONLY)


G
H
I
J
K
L
PCB1
CARD CABLE, 19P
PCB2
CP202
CP201
DSP P.C.B
PCB3
SYS CNT ASS'Y
4007000730C
SYSTEM CONNECTOR, 13P
FROM TX-747 or TX-757
EXPLODED VIEW II (Page 72)
ITEM (53)
DRIVE UNIT (KSM-2401ABM)
EXPLODED VIEW II (Page 72)
ITEM (54), (56)
EXPLODED VIEW II (Page 72)
ITEM ㉕, (55)
PCB SENSOR
YELLOW
GREEN
BLUE
BLACK
RED
WHITE
WHITE
WHITE
WHITE
RED
PCB6
CN601
VIDEO JACK B'D
4007000740C
(VCDC757 ONLY)
PCB7
(VCDC757 ONLY)

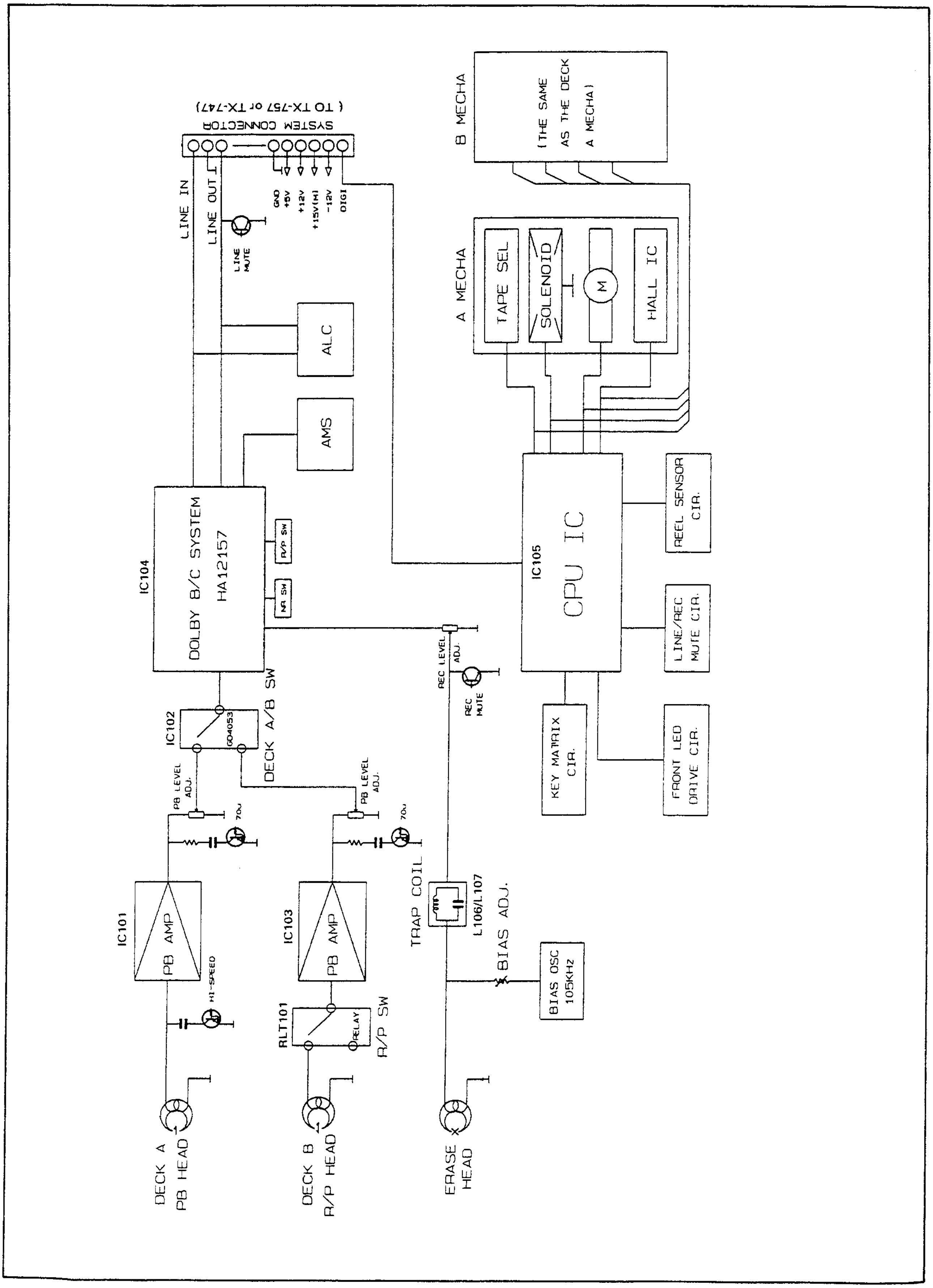
▪ DD-757 ▪

SPECIFICATIONS

Track Configuration	
The 4-track, 2-channels and a rotary reverse type head stereo cassette deck motors	
1-Electronic governor	
1-High torque DC motor (Reel)	
Mechanism	
1-Motor, 1-Solenoid mechanism	
Heads	
Rec/Playback head	Hard permalloy
Eraser head	Double gap ferrite
Tape Speed 1-7/8 IPS (4.76 cm/sec) (FWD/REV)	±1.0/±1.0%
Wow/Flutter (CCIR Unweighted)	No more than 0.35%
Fast Winding Time (C-60)	About 120 sec
Input Sensitivity Impedance	
REC IN	400 mV/51 kΩ
Output Level/Load Impedance	
PLAY OUT	400 mV/1.5 kΩ
Signal to Noise Ratio (W.CCIR/ARM)	
CrO_2 Tape with Dolby B/C NR	More than 66/76 dB
CrO_2 Tape without Dolby B/C NR	More than 56 dB
Frequency Response (-20 dB REC Dolby NR off)	
Normal Tape	20 Hz - 17.5 kHz, ±3 dB
CrO_2 Tape	20 Hz - 17.5 kHz, ±3 dB
Metal Tape	20 Hz - 17.5 kHz, ±3 dB
Total Harmonic Distortion (3rd, 333 Hz, 0 dB, Normal Tape)	No more than 1.0%
Channel Separation	No more than 38 dB

BLOCK DIAGRAM

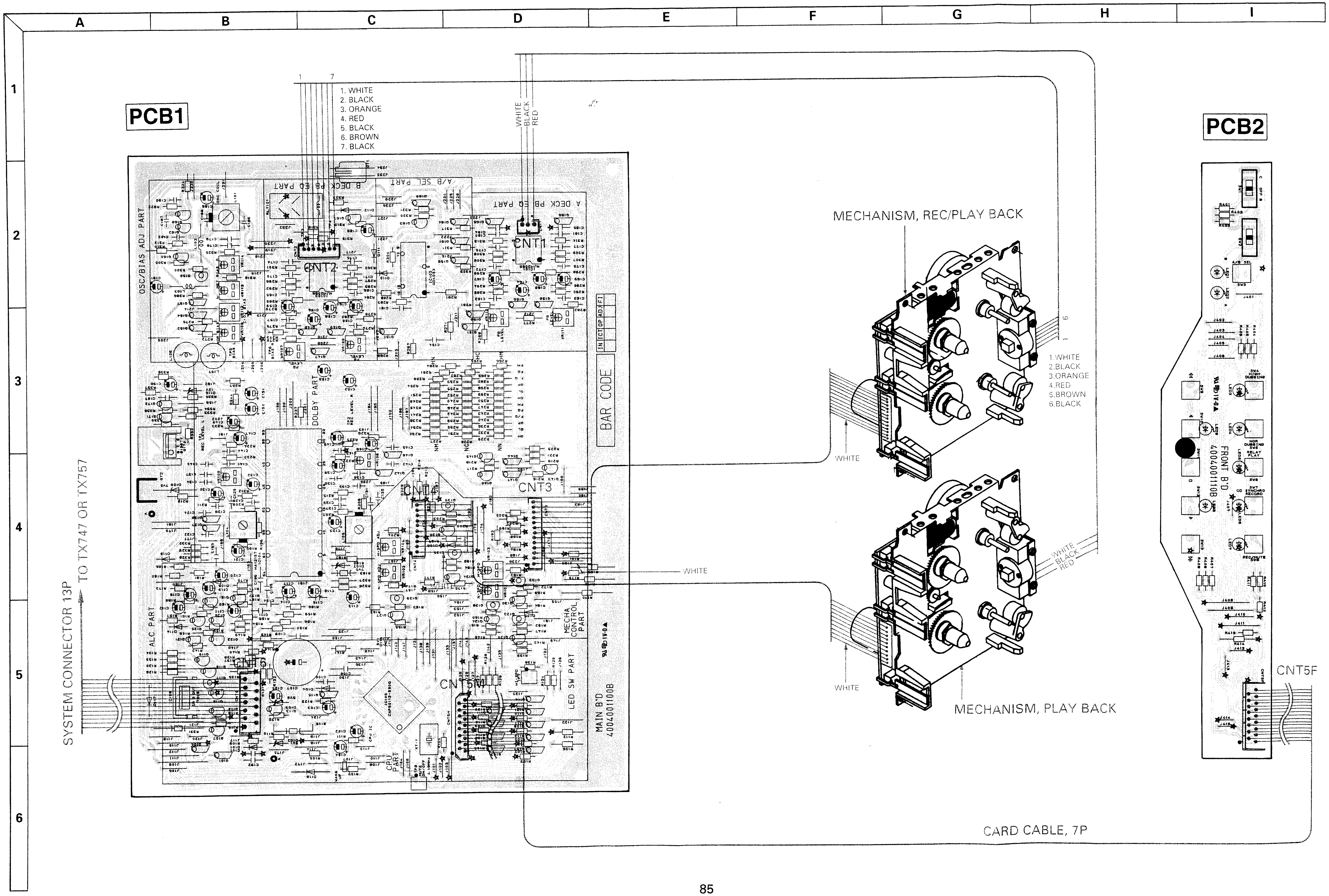
Model No. : DD-757



SYSTEM CONNECTOR
(TO TX-757 or TX-747)
B MECHA
(THE SAME AS THE DECK A MECHA)
LINE IN
LINE OUT
LINE MUTE
GND
+5V
+12V
+15V(H)
-12V
DIGI
A MECHA
TAPE SEL
SOLENOID
M
HALL IC
ALC
AMS
IC104
DOLBY B/C SYSTEM
HA12157
R/P SW
NR SW
IC105
CPU IC
REEL SENSOR CIR.
LINE/REC MUTE CIR.
REC LEVEL ADJ.
REC MUTE
IC102
GD4053
DECK A/B SW
KEY MATRIX CIR.
FRONT LED DRIVE CIR.
PB LEVEL ADJ.
PB LEVEL ADJ.
70u
70u
IC101
PB AMP
HI-SPEED
IC103
PB AMP
TRAP COIL
L106/L107
BIAS ADJ.
BIAS OSC
105KHz
RLT101
RELAY
R/P SW
DECK A
PB HEAD
DECK B
R/P HEAD
ERASE HEAD

WIRING DIAGRAM

Model No. : DD-757


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
PCB1
1 7
1. WHITE
2. BLACK
3. ORANGE
4. RED
5. BLACK
6. BROWN
7. BLACK
WHITE
BLACK
RED
B DECK PB EQ PART
A/B SEL PART
A DECK PB EQ PART
OSC/BIAS ADJ PART
CNT2
CNT1
DOLBY PART
BAR CODE
CNT3
CNT4
ALC PART
MECHA CONTROL PART
LED SW PART
CNT6
CNT5M
CPU PART
MAIN B'D
4004001100B
SYSTEM CONNECTOR 13P
TO TX747 OR TX757
MECHANISM, REC/PLAY BACK
1 6
1.WHITE
2.BLACK
3.ORANGE
4.RED
5.BROWN
6.BLACK
WHITE
WHITE
BLACK
RED
WHITE
MECHANISM, PLAY BACK
PCB2
FRONT B'D
4004001110B
CNT5F
CARD CABLE, 7P

DISASSEMBLY PROCEDURES

REFER TO PAGES 85 AND 95.

[1] COVER TOP REMOVAL

Remove 6 screws ⓐ and then remove the Cover Top㊴

[2] FRONT PANEL ASSEMBLY REMOVAL

1. Remove the Cover Top㊴, referring to the previous step [1].
2. Remove the card cable from wafer (CNT5M) on the Main P.C.Board (PCB1).
3. Disconnect (CNT1, CNT2, CNT3 and CNT4) from Main P.C.Board (PCB1).
4. Remove 7 screws ⓑ and then remove the Front Panel Assembly AA.

[3] MECHANISM ASSEMBLY REMOVAL

1. Remove the Cover Top㊴, refering to the previous step [1].
2. Remove the Front Panel Assembly AA, referring to the previous step [2].
3. Remove Base Door ⑦ and ⑧ by pressing the hooks of both sides and pulling it toward you gently.
4. Remove 8 screws ⓒ and then remove the Mechanism ㉕ and ㉖.
5. Remove the Lid Cassette ⑨ right and left.
6. Remove 4 screws ⓓ and then remove the Guide Door ⑲.

[4] FRONT P.C.BOARD (PCB2) REMOVAL

1. Remove the Cover Top㊴, referring to the previous step [1].
2. Do steps [2] and [3].
3. Remove 2 screws ⓔ and then remove the Front P.C.Board (PCB2).

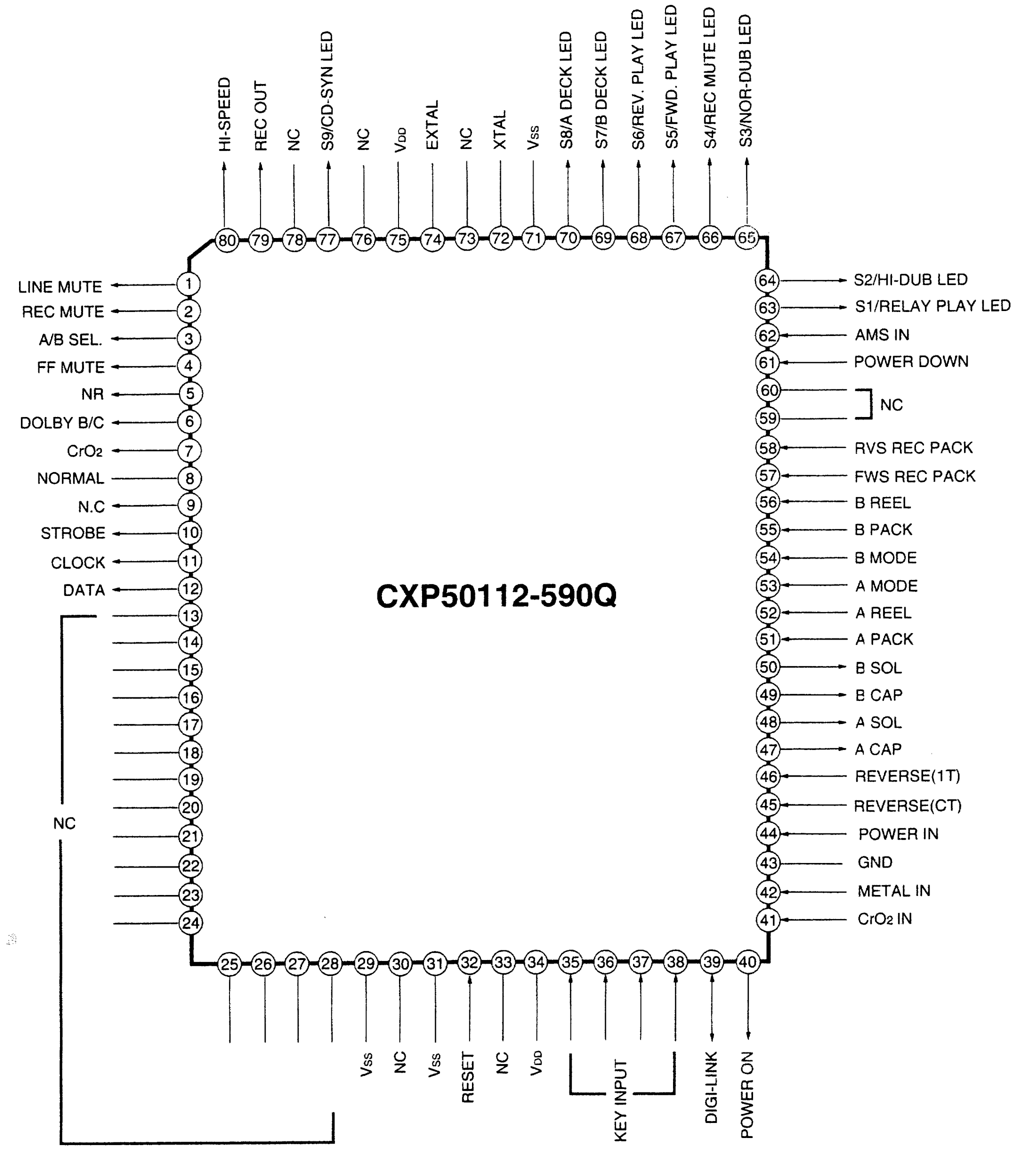
[5] MAIN P.C.BOARD (PCB1) REMOVAL

1. Remove the Cover Top㊴, referring to the previous step [1].
2. Remove the card cable from wafer (CNT5M) on the Main P.C.Board (PCB1).
3. Disconnect (CNT1, CNT2, CNT3, CNT4 and CNT6) from the Main P.C.Board (PCB1).
4. Remove 2 screws ⓕ and then Main P.C.Board (PCB1).

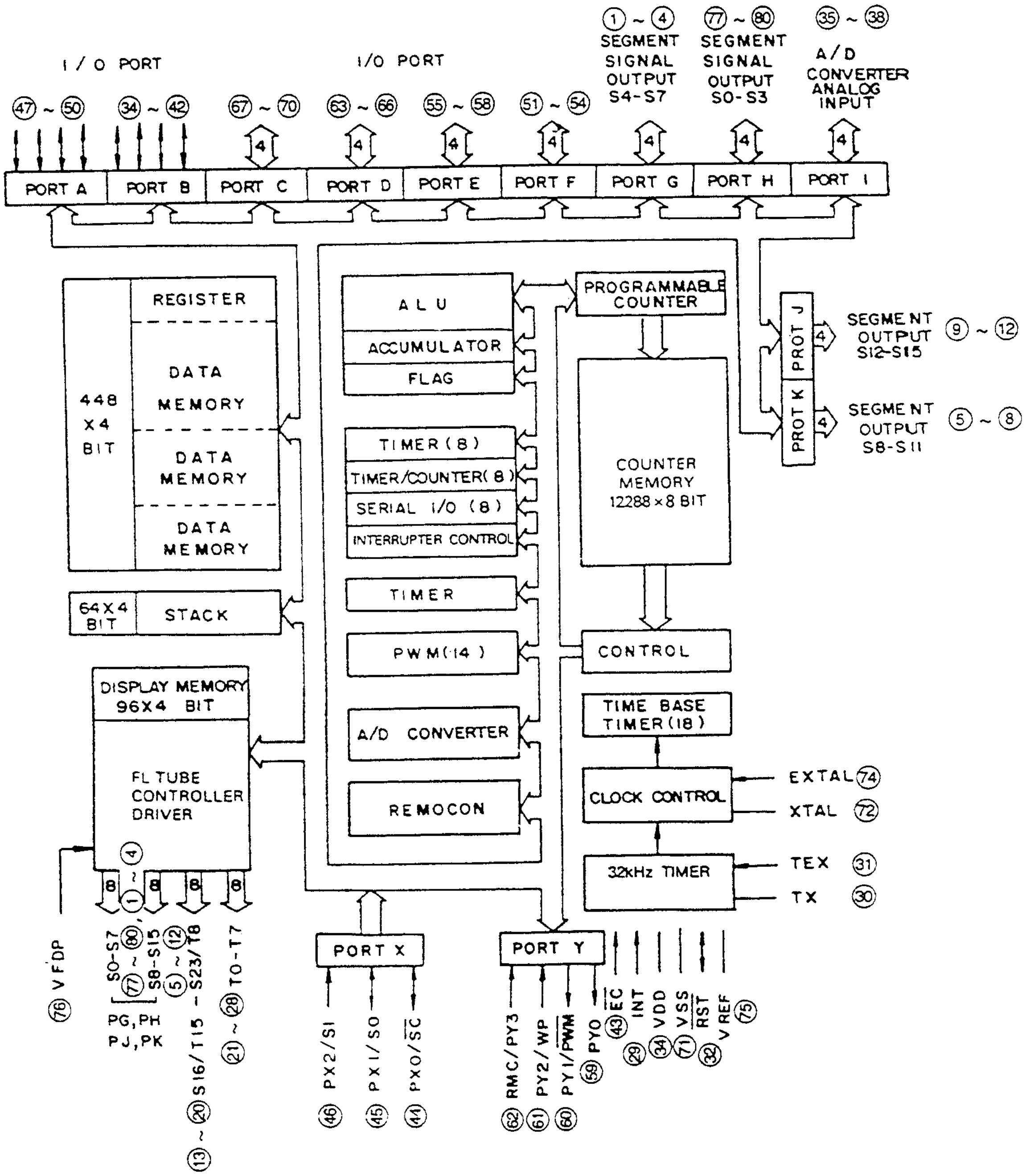
CIRCUIT DESCRIPTION

CPU(IC105):CXP50112-590Q

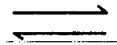
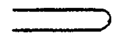
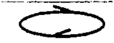
1. Pin Description


HI-SPEED
REC OUT
NC
S9/CD-SYN LED
NC
V_{DD}
EXTAL
NC
XTAL
V_{SS}
S8/A DECK LED
S7/B DECK LED
S6/REV. PLAY LED
S5/FWD. PLAY LED
S4/REC MUTE LED
S3/NOR-DUB LED
80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65
LINE MUTE
REC MUTE
A/B SEL.
FF MUTE
NR
DOLBY B/C
CrO2
NORMAL
N.C
STROBE
CLOCK
DATA
NC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
CXP50112-590Q
64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41
S2/HI-DUB LED
S1/RELAY PLAY LED
AMS IN
POWER DOWN
NC
RVS REC PACK
FWS REC PACK
B REEL
B PACK
B MODE
A MODE
A REEL
A PACK
B SOL
B CAP
A SOL
A CAP
REVERSE(1T)
REVERSE(CT)
POWER IN
GND
METAL IN
CrO2 IN
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
V_{SS}
NC
V_{SS}
RESET
NC
V_{DD}
KEY INPUT
DIGI-LINK
POWER ON

2. Block Diagram


I / O PORT
I/O PORT
① ~ ④
SEGMENT SIGNAL OUTPUT S4-S7
(77) ~ (80)
SEGMENT SIGNAL OUTPUT S0-S3
㉟ ~ ㊳
A/D CONVERTER ANALOG INPUT
㊼ ~ ㊿
㉞ ~ ㊷
(67) ~ (70)
(63) ~ (66)
(55) ~ (58)
(51) ~ (54)
4
PORT A
PORT B
PORT C
PORT D
PORT E
PORT F
PORT G
PORT H
PORT I
REGISTER
DATA MEMORY
448 X4 BIT
DATA MEMORY
DATA MEMORY
64X4 BIT
STACK
DISPLAY MEMORY 96X4 BIT
FL TUBE CONTROLLER DRIVER
ALU
ACCUMULATOR
FLAG
TIMER (8)
TIMER/COUNTER (8)
SERIAL I/O (8)
INTERRUPTER CONTROL
TIMER
PWM (14)
A/D CONVERTER
REMOCON
PROGRAMMABLE COUNTER
COUNTER MEMORY 12288×8 BIT
CONTROL
TIME BASE TIMER (18)
CLOCK CONTROL
32kHz TIMER
PROT J
PROT K
SEGMENT OUTPUT S12-S15 ⑨ ~ ⑫
SEGMENT OUTPUT S8-S11 ⑤ ~ ⑧
EXTAL (74)
XTAL (72)
TEX ㉛
TX ㉚
8
(76) VFDP
S0-S7 ① ~ ④, (77) ~ (80)
S8-S15 ⑤ ~ ⑫
PG, PH PJ, PK
⑬ ~ ⑳ S16/T15 - S23/T8
㉑ ~ ㉘ T0-T7
PORT X
㊻ PX2/SI
㊺ PX1/SO
㊹ PX0/SC
PORT Y
(62) RMC/PY3
(61) PY2/WP
(60) PY1/PWM
(59) PY0
㊸ EC
㉙ INT
㉞ VDD
(71) VSS
㉜ RST
(75) V REF

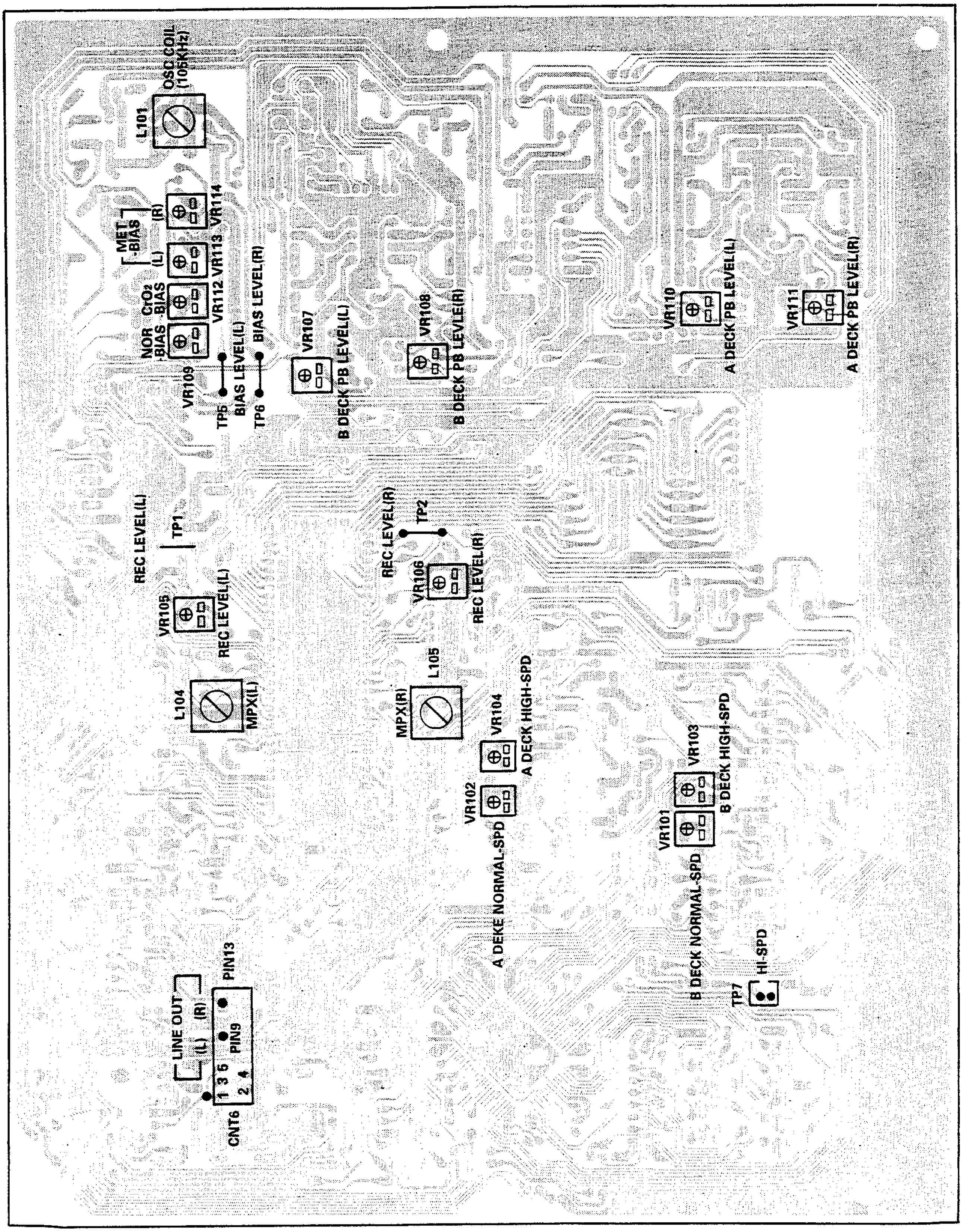
3. Input and Output Terminal Function

<table>
<tr><th>Pin No.</th><th>Symbol</th><th>Description</th></tr>
<tr><td>1</td><td>LINE MUTE</td><td>Output for muting the line output.
Except play or recording (dubbing), output is "H".</td></tr>
<tr><td>2</td><td>REC MUTE</td><td>Output for muting recording output. (If recording, then "L")</td></tr>
<tr><td>3</td><td>A/B SEL.</td><td>Output for controlling to select Deck A or B. (If Deck B, then "H")</td></tr>
<tr><td>4</td><td>FF MUTE</td><td>Output for muting line output during FF or REW. (If FF or REW, then "H")</td></tr>
<tr><td>5</td><td>NR</td><td>Output for controlling the noise reduction. (If the NR mode, then "H")</td></tr>
<tr><td>6</td><td>B/C</td><td>Output for controlling the DOLBY B/C. (If the DOLBY B, then "H")</td></tr>
<tr><td>7</td><td>C_rO_2</td><td>Output for checking a C_rO_2 mode on Deck B. (If C_rO_2 tape, then "H".)</td></tr>
<tr><td>8</td><td>NORMAL</td><td>Output for checking a Nor. mode on Deck B. (If Nor. tape, then "H".)</td></tr>
<tr><td>9</td><td>NC</td><td>Not Used !</td></tr>
<tr><td>10</td><td>STROBE</td><td>Strobe output to IC104 (HA12157).</td></tr>
<tr><td>11</td><td>CLK</td><td>Clock output to IC104 (HA12157).</td></tr>
<tr><td>12</td><td>DATA</td><td>Data output to IC104 (HA12157).</td></tr>
<tr><td>13~28</td><td>NC</td><td>Not Used !</td></tr>
<tr><td>29</td><td>Vss</td><td>This pin provides the ground potential.</td></tr>
<tr><td>30</td><td>NC</td><td>Not Used !</td></tr>
<tr><td>31</td><td>Vss</td><td>This pin provides the ground potential.</td></tr>
<tr><td>32</td><td>RESET</td><td>Input for the resetting system.</td></tr>
<tr><td>33</td><td>NC</td><td>Not Used !</td></tr>
<tr><td>34</td><td>Vdd</td><td>+5 V power supply for CPU (IC105).</td></tr>
<tr><td>35~38</td><td>KEY INPUT</td><td>Data input for key scan.</td></tr>
<tr><td>39</td><td>DIGI-LINK</td><td>Input/Output for controlling DIGI-LINK.</td></tr>
<tr><td>40</td><td>POWER ON</td><td>Output for power on. (If power on, then "H")</td></tr>
<tr><td>41</td><td>CrO2 IN</td><td>Input for checking a C_rO_2 tape on Deck B. (If C_rO_2 tape, then "H")</td></tr>
<tr><td>42</td><td>METAL IN</td><td>Input for checking a metal tape on Deck B. (If metal tape, then "H")</td></tr>
<tr><td>43</td><td>GND</td><td>Ground</td></tr>
<tr><td>44</td><td>POWER IN</td><td>Input for power on for itself. (If power on itself, then "L")</td></tr>
<tr><td>45/46</td><td>REVERSE CT/1T</td><td>According to reverse mode switch setting, input for selecting the desired reverse mode.
<table>
<tr><th>Reverse mode</th><th>Reverse CT</th><th>Reverse 1T</th></tr>
<tr><td></td><td>L</td><td>H</td></tr>
<tr><td></td><td>H</td><td>L</td></tr>
<tr><td></td><td>H</td><td>H</td></tr>
</table></td></tr>
<tr><td>47</td><td>A CAP.</td><td>Output for driving the capstan of Deck A.</td></tr>
<tr><td>48</td><td>A SOL.</td><td>Output for driving the solenoid of Deck A.</td></tr>
<tr><td>49</td><td>B CAP.</td><td>Output for driving the capstan of Deck B</td></tr>
<tr><td>50</td><td>B. SOL.</td><td>Output for driving the solenoid of Deck B</td></tr>
<tr><td>51</td><td>A PACK</td><td>Input for checking a tape on Deck A. (If there's a tape, then "L")</td></tr>
<tr><td>52</td><td>A REEL</td><td>Input for detecting the reel pulse from Deck A.</td></tr>
<tr><td>53</td><td>A MODE</td><td>Input for detecting the play state on Deck A.</td></tr>
<tr><td>54</td><td>B MODE</td><td>Input for detecting the play state on Deck B.</td></tr>
<tr><td>55</td><td>B PACK</td><td>Input for checking a tape on Deck B. (If there's a tape, then "L")</td></tr>
<tr><td>56</td><td>B REEL</td><td>Input for detecting the reel pulse from Deck B.</td></tr>
<tr><td>57</td><td>FWD REC PACK</td><td>Input for checking the forward tap of tape. (If there's the tape, then "L")</td></tr>
<tr><td>58</td><td>RVS REC PACK</td><td>Input for checking the reverse tap of tape. (If there's the tape, then "L")</td></tr>
<tr><td>59/60</td><td>NC</td><td>Not Used !</td></tr>
</table>

Pin No.	Symbol	Description
61	POWER DOWN	Input for checking the power down. (If power down, then "L")
62	AMS IN	Input for checking the balnk space during AMS (Atomatic Music Searching) (If on the blank space, then "H").
63	S1 RL-PLAY	Output for lighting on the LED at relay play mode. (If relay play, then "H")
64	S2 HI-DUB	Output for lighting on the LED at high dubbing mode. (If high dubbing, then "H").
65	S3 NOR-DUB	Output for lighting on the LED at normal dubbing mode. (If normal dubbing, then "H").
66	S4 REC MUTE	Output for lighting on the LED at recoding mute mode. (If recording must, then "H").
67	S5 FWD PLAY	Output for lighting on the LED at forward play mode. (If forward play, then "H")
68	S6 REV PLAY	Output for lighting on the LED at reverse play mode. (If reverse play, then "H")
69	S7 B DECK	Output for lighting on the LED at deck B mode. (If deck B play, then "H")
70	S8 A DECK	Output for lighting on the LED at deck A mode. (If deck A play, then "H")
71	Vss	This pin provides the ground potential.
72	XTAL	Output for crystal oscillator.
73	NC	Not Used !
74	EXTAL	Input for crystal oscillator.
75	Vdd	+5 V power supply for CPU (IC105).
76	NC	Not Used !
77	S9 CD-SYN LED	Output for lighting on the LED at CD synchro mode. (If CD synchro, then "L")
78	NC	Not Used !
79	REC OUT	Output for controlling the record.
80	HI-SPEED	Output for controlling the tape speed. (If hi-speed, then "H")

ALIGNMENT PROCEDURES

Adjustment and Test Points (PCB2)


OSC COIL (105KHz)
L101
MET-BIAS
(L)
(R)
NOR-BIAS
CrO₂-BIAS
VR109
VR112
VR113
VR114
TP5
BIAS LEVEL(L)
TP6
BIAS LEVEL(R)
VR107
B DECK PB LEVEL(L)
VR108
B DECK PB LEVLE(R)
VR110
A DECK PB LEVEL(L)
VR111
A DECK PB LEVEL(R)
REC LEVEL(L)
TP1
VR105
REC LEVEL(L)
REC LEVEL(R)
TP2
VR106
REC LEVEL(R)
L104
MPX(L)
MPX(R)
L105
VR104
A DECK HIGH-SPD
VR102
A DEKE NORMAL-SPD
VR101
VR103
B DECK NORMAL-SPD
B DECK HIGH-SPD
TP7
HI-SPD
LINE OUT
(L)
(R)
1 3 5
2 4
PIN9
PIN13
CNT6

Before Measurements and Adjustments

The following general conditions apply to the electrical measurements and adjustments unless especially stated otherwise.

- Dolby NR switch off.
- Use 400mV(200 nwb/m) for 0 dB as the standard level of the unit.

1. Test tape

• TCC-155	Azimuth (14kHz, -24 dB)
• TCC-114	Tape speed (3.15 kHz, -10 dB)
• TCC-130	Playback level (Dolby NR ref. tape 400 Hz, 0 dB)
• TCC-185C	Playback frequency response

- Reference Blank Tape.

• Normal	TDK AC-224
• CrO2	TDK AC-513
• Metal	TDK AC-712

2. Instruments required

- Audio frequency oscillator
- ACVM or dual channel mV-meter
- Wow/Flutter meter
- Oscilloscope

Playback Section

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Head Azimuth	TCC-155 14 kHz (A.BEX)	FWD Play (A & B Deck)		Line output	AC mV-meter Oscilloscope	Adjusting a right screw of head	Max • Lissajous wave from become a straight, line with an angle 45 deegrees
		REW Play (A & B Deck)				Adjusting a left screw of head	
Playback at normal speed	TCC-114 3.15 kHz −10 dB(A. Bex)	Play (A & B Deck)			Wow and Flutter Meter	A Deck VR102 & B Deck VR101	3150 Hz±30 Hz
Playback at hi-speed (TP7 short)	TCC-114 3.15 kHz −10 dB(A.Bex)					A Deck VR104 & B Deck VR103	4725 Hz±45 Hz
Playback Level	TCC-130 400 Hz, 0 dB(A. Bex)					A Deck VR110,111	400 mV
						B Deck VR107,VR108	400 mV
Playback Frequency Response	TCC-185C 12.5 kHz, 1 kHz, 60 Hz (A. Bex)				AC mV-meter		See graph Fig. 2 freq. response

Recording Section

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Bias OSC Frequency	AC-712(TDK)	Rec/Pause		TP5	Frequency Counter	L101	105 kHz ±400 Hz

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Target Value Bias	Metal, AC-712			TP5, TP6		VR113, VR114	AC 10.9 V
	CrO2, AC-513					VR112	AC 6.8 V
	Normal, AC-224					VR109	AC 6 V
Recording Level	AC-712 (TDK)		400 Hz, 80 mV to Line in	TP1, TP2		VR105, VR106	About 6.7mV
Bias	AC-712 AC-513 AC-224 (TDK)	Rec/Pause	400 Hz to Line	Line out	AC mV-meter	See Target Value Bias	If necessary repeat bias adjustment See graph fig. 1
			4 kHz - 6.3 kHz 10 kHz - 12 kHz 14 kHz - 16 kHz to Line in		Recording number of frequency with the same input voltage and play them back.		
19kHz Suppression	Arbitrary Tape	Rec/Pause	19 kHz to Line	Line out	AC mV-meter	LF Generator	100mV
				Line out	AC mV-meter Oscilloscope	L104/105	Minimize the reading on ACVM.

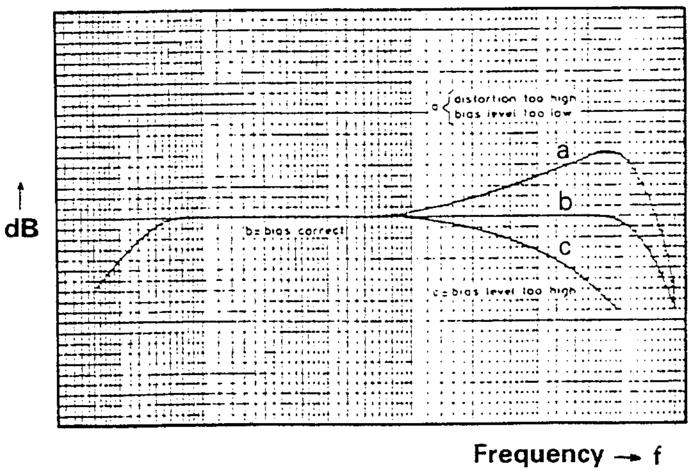
Note:

*a. Prior to any measurement or adjstment with the tape running, heads and tape guides should be degaussed and cleaned. Reference below the figuer.

*b. The maximum permissible speed variation ±1.0%. Moerover the Wow and Flutter can be read. This value on line out should exceed 0.2%.

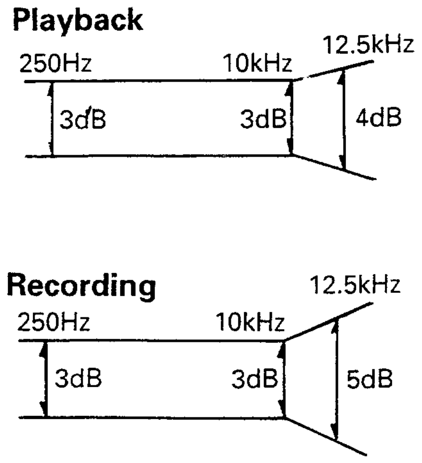
*c. The voltage on line out should be 400 mV ± 20 mV. If not, it reduce the LF signal (bias disabled) as many as the reading was too low or too high by VR107/108, VR110/111.

*d. When the channel is adjsted, this may slightly affect the adjutment of the other channel. If the adjustment is correct, the frequency response curve will be similar to curve b in figuer 1, distrortion below 3%.



REC Bias & THD Graph

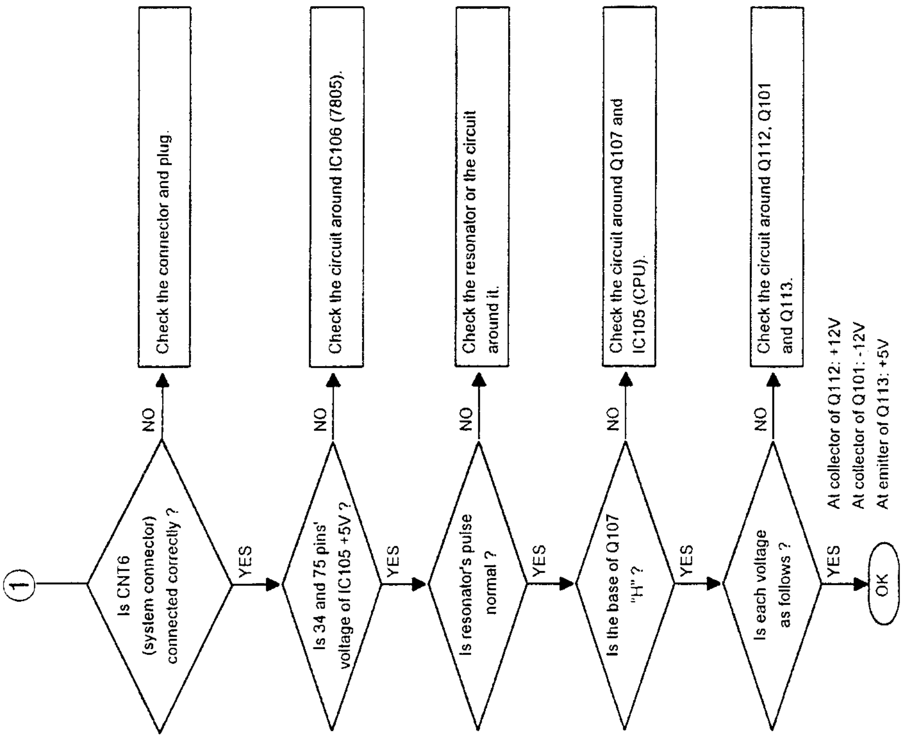
Fig. 1

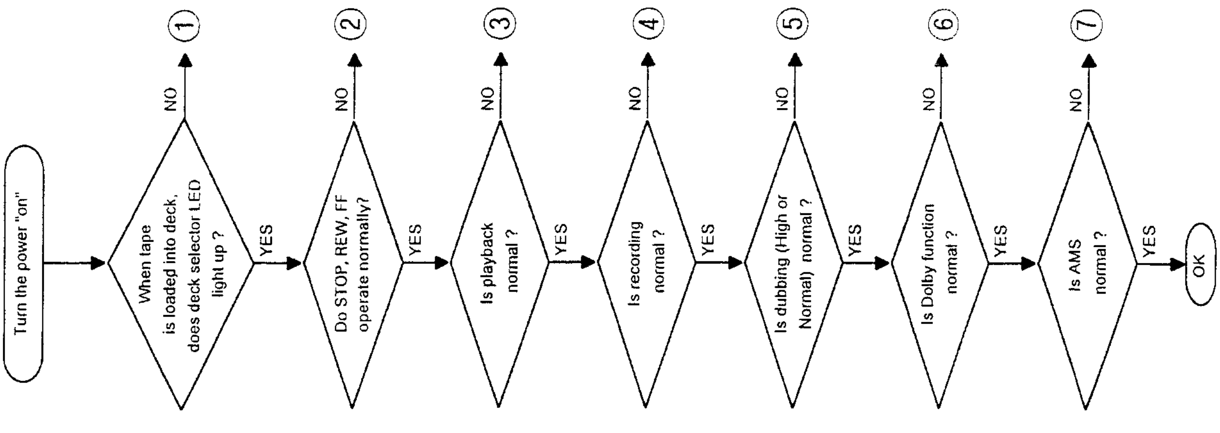


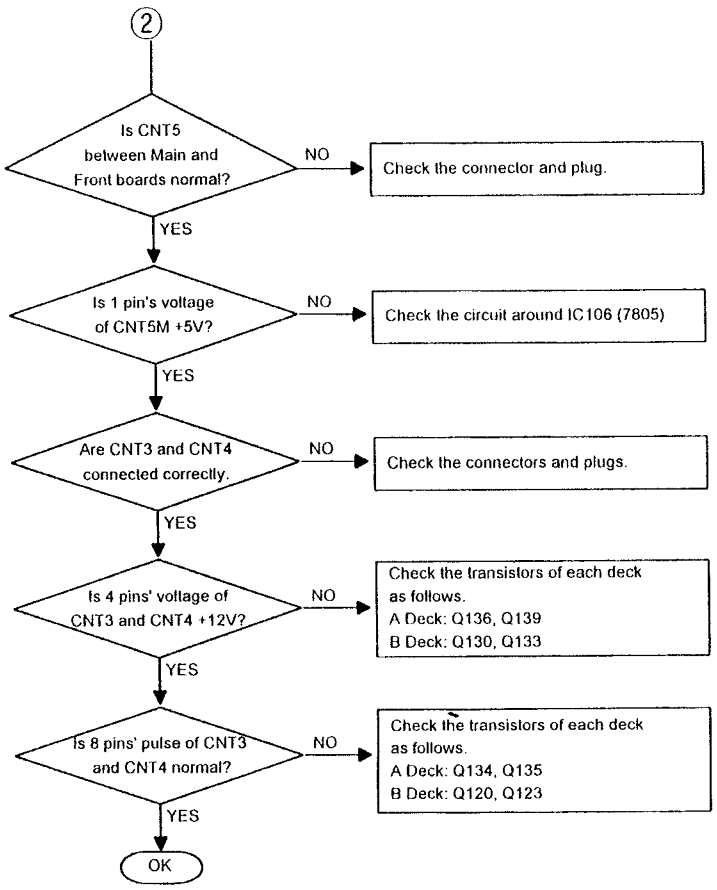
Allowable Playback/Recording Frequency Response Zone

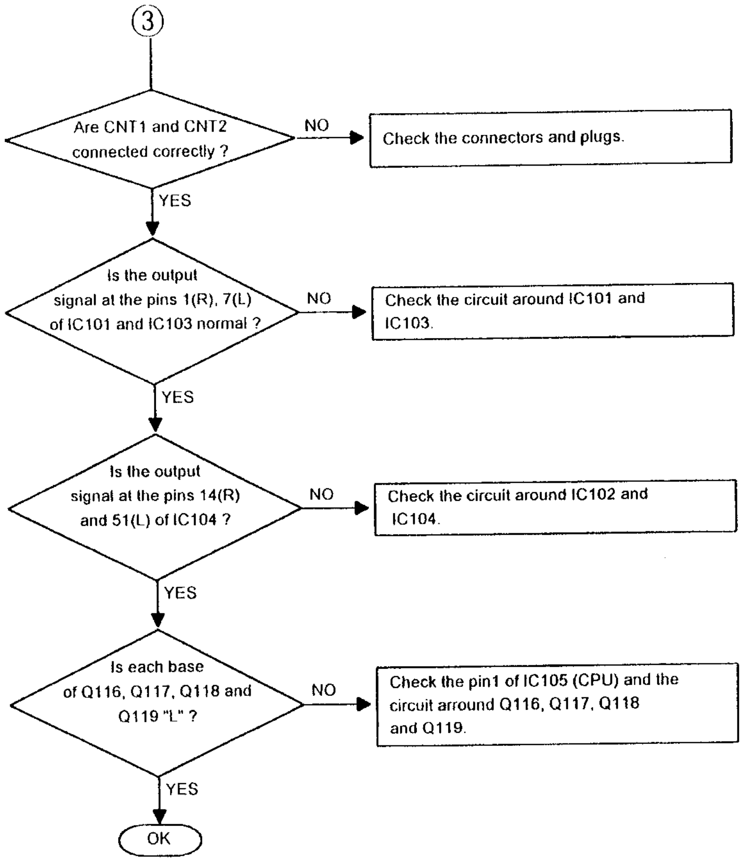
Fig. 2

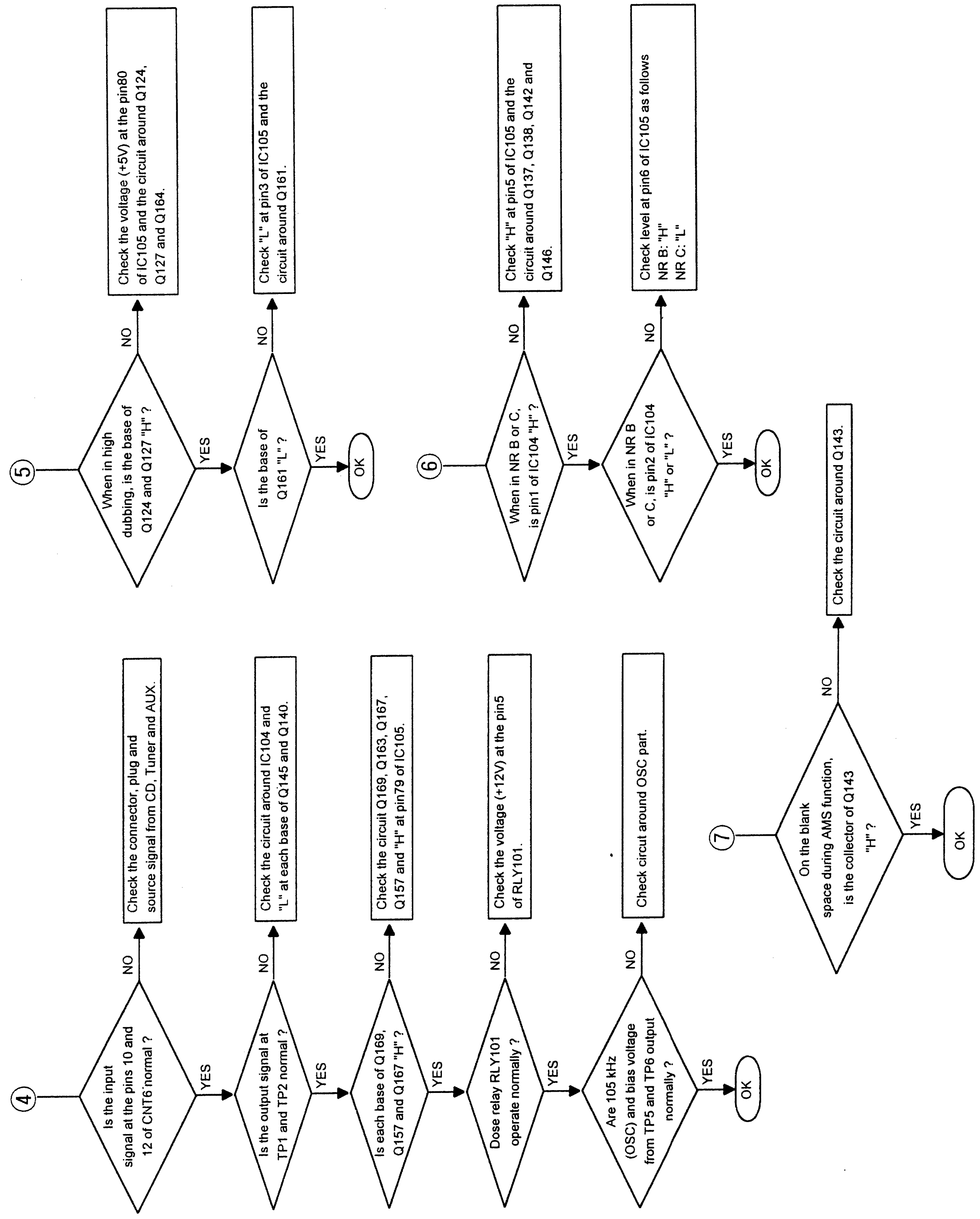
TROUBLESHOOTING


①
Is CNT6 (system connector) connected correctly ?
NO
Check the connector and plug.
YES
Is 34 and 75 pins' voltage of IC105 +5V ?
NO
Check the circuit around IC106 (7805).
YES
Is resonator's pulse normal ?
NO
Check the resonator or the circuit around it.
YES
Is the base of Q107 "H" ?
NO
Check the circuit around Q107 and IC105 (CPU).
YES
Is each voltage as follows ?
NO
Check the circuit around Q112, Q101 and Q113.
At collector of Q112: +12V
At collector of Q101: -12V
At emitter of Q113: +5V
YES
OK


Turn the power "on"
When tape is loaded into deck, does deck selector LED light up ?
NO
①
YES
Do STOP, REW, FF operate normally?
NO
②
YES
Is playback normal ?
NO
③
YES
Is recording normal ?
NO
④
YES
Is dubbing (High or Normal) normal ?
NO
⑤
YES
Is Dolby function normal ?
NO
⑥
YES
Is AMS normal ?
NO
⑦
YES
OK


②
Is CNT5 between Main and Front boards normal?
NO
Check the connector and plug.
YES
Is 1 pin's voltage of CNT5M +5V?
NO
Check the circuit around IC106 (7805)
YES
Are CNT3 and CNT4 connected correctly.
NO
Check the connectors and plugs.
YES
Is 4 pins' voltage of CNT3 and CNT4 +12V?
NO
Check the transistors of each deck as follows.
A Deck: Q136, Q139
B Deck: Q130, Q133
YES
Is 8 pins' pulse of CNT3 and CNT4 normal?
NO
Check the transistors of each deck as follows.
A Deck: Q134, Q135
B Deck: Q120, Q123
YES
OK


③
Are CNT1 and CNT2 connected correctly ?
NO
Check the connectors and plugs.
YES
Is the output signal at the pins 1(R), 7(L) of IC101 and IC103 normal ?
NO
Check the circuit around IC101 and IC103.
YES
Is the output signal at the pins 14(R) and 51(L) of IC104 ?
NO
Check the circuit around IC102 and IC104.
YES
Is each base of Q116, Q117, Q118 and Q119 "L" ?
NO
Check the pin1 of IC105 (CPU) and the circuit arround Q116, Q117, Q118 and Q119.
YES
OK


⑤
When in high dubbing, is the base of Q124 and Q127 "H" ?
NO
Check the voltage (+5V) at the pin80 of IC105 and the circuit around Q124, Q127 and Q164.
YES
Is the base of Q161 "L" ?
NO
Check "L" at pin3 of IC105 and the circuit around Q161.
YES
OK
⑥
When in NR B or C, is pin1 of IC104 "H" ?
NO
Check "H" at pin5 of IC105 and the circuit around Q137, Q138, Q142 and Q146.
YES
When in NR B or C, is pin2 of IC104 "H" or "L" ?
NO
Check level at pin6 of IC105 as follows NR B: "H" NR C: "L"
YES
OK
④
Is the input signal at the pins 10 and 12 of CNT6 normal ?
NO
Check the connector, plug and source signal from CD, Tuner and AUX.
YES
Is the output signal at TP1 and TP2 normal ?
NO
Check the circuit around IC104 and "L" at each base of Q145 and Q140.
YES
Is each base of Q169, Q157 and Q167 "H" ?
NO
Check the circuit Q169, Q163, Q167, Q157 and "H" at pin79 of IC105.
YES
Dose relay RLY101 operate normally ?
NO
Check the voltage (+12V) at the pin5 of RLY101.
YES
Are 105 kHz (OSC) and bias voltage from TP5 and TP6 output normally ?
NO
Check circuit around OSC part.
YES
OK
⑦
On the blank space during AMS function, is the collector of Q143 "H" ?
NO
Check the circuit around Q143.
YES
OK

MECHANICAL PARTS LIST

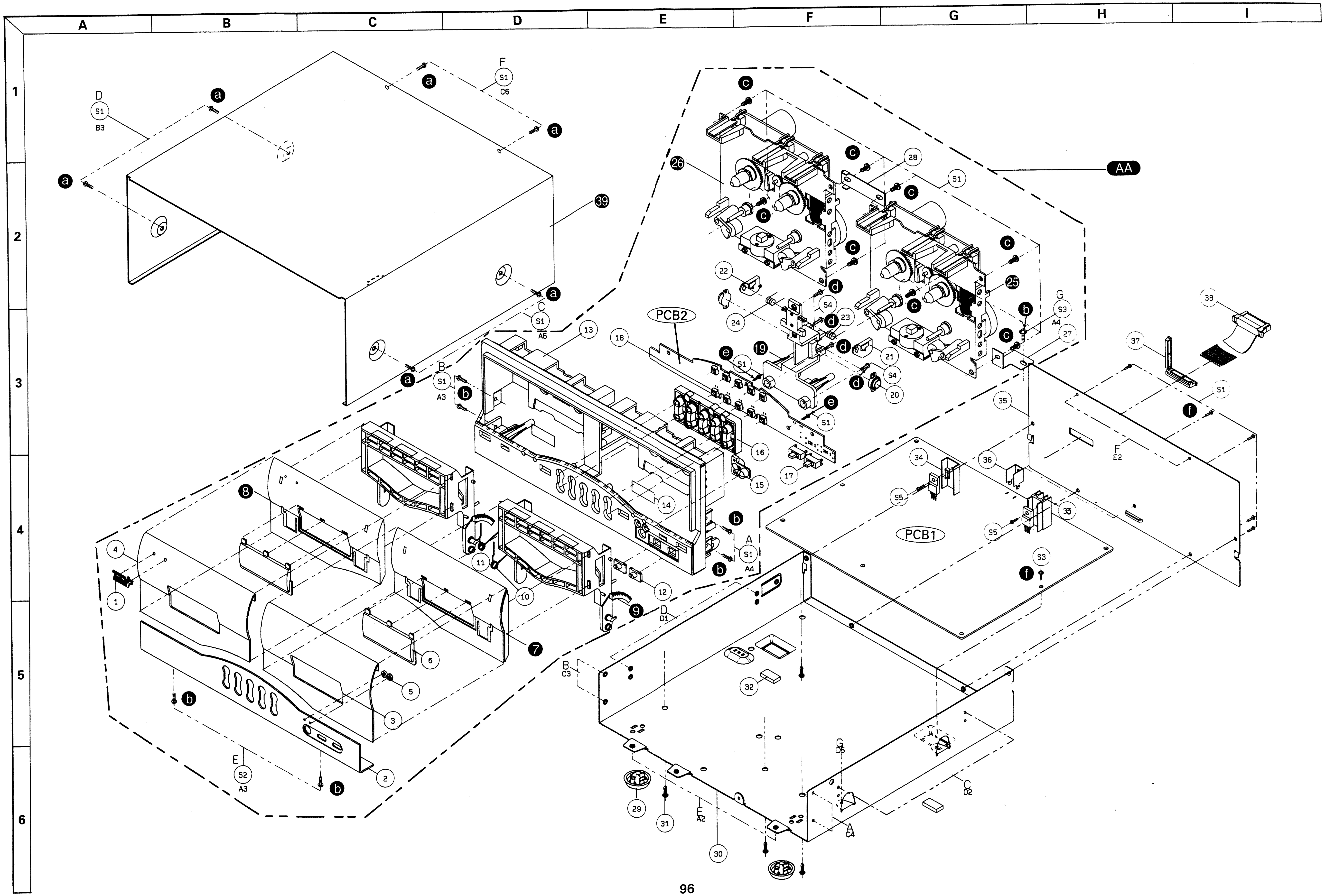
Ref. No.	Description	Parts No.	Q'ty	Version
	PACKAGE			
	Carton Box	049605258203	1	KS
	Carton Box	049605258204	1	A,D,PT INDO
	Cushion Poly	9722041210	1	
	Film Soft PE	9715000120	1	
	CABINET & CHASSIS			
1	Badge, INKEL	048535045411	1	KS
(1)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO
2	Panel Front	048602020011	1	
3	Door, Right	048663001511	1	
4	Door, Left	048663001521	1	
5	Indicator LED	8555052610	2	
6	Window Door	048555052711	2	
7	Base Door, Right	046512001911	1	
8	Base Door, Left	046512001921	1	
9	Lid Cassette	8562006610	1	
10	Door Spring	6555610210	1	
11	Door Spring	6555610220	1	
12	Knob Slide	048545131611	2	
13	Body Front	048521009611	1	
14	Label Mirror	9057095396	2	
15	Button Selector	048545131211	1	
16	Button Function	048543070212	1	
17	Switch Slide	4618008310	2	
18(SW3-13)	Switch Tact	4658004410	11	
19	Guide Door	8523013410	1	
20	Damper Oil	6308002310	2	
21	Lever Eject, Right	7143104220	1	
22	Lever Eject, Left	7143104210	1	
23	Spring Lever "A"	6555013510	1	
24	Spring Lever "B"	6555013520	1	
25	Deck Mecha, R/P	5708015110	1	
26	Deck Mecha, CMAL2Z035A	5708014710	1	
27	Bracket Shield	6165151310	1	
28	Bracket Shield	6165151210	1	
29	Foot	6035104310	2	
30	Chassis Main	6121614920	1	
31	Fastener	6528301710	4	
32	Cushion Foot	6715021230	1	
33	Heatsink	7505202410	1	
34	Heatsink	7505202410	1	
35	Chassis Back	046102044611	1	KS
(35)	Chassis Back	046102044613	1	PT INDO
(35)	Chassis Back	046102044612	1	D
(35)	Chassis Back		1	A
36	Plate Ground	6165143510	1	
37	Stopper Connector	6518002210	1	
38	Connector, System, 13P	4358613501	1	
39	Cover Top	046123017821	1	
	HARDWARE KIT			
S1	Screw, #2BTT 3x8B	8179130083	25	
S2	Screw, #2FTC 3x8B	8129230083	2	
S3	Screw, #2WPTT 3x6Y	8159230061	2	
S4	Screw, #2BTC 3x10B	8109230103	4	
S5	Screw, #2BTC 3x6B	8109230063	2	
	MISCELLANEOUS			
	Connector, Lead Ass'y, 3P, 220mm, Shield	436203227032	1	
	Connector, Lead Ass'y, 10P, 200mm	436210200532	1	
	Connector, Lead Ass'y, 7P, 200mm, Shield	435207208002	1	
	Connector, Lead Ass'y, 13P, 200mm	436213200532	1	
	Card Cable, YS=1.25-17-180-C	4118617185	1	
PCB1	P.C.Board Main	4004001100	1	
PCB2	P.C.Board Front	4004001110	1	

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list are of special significance to safety. When replacing a component identified with ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW

Model No. : DD-757

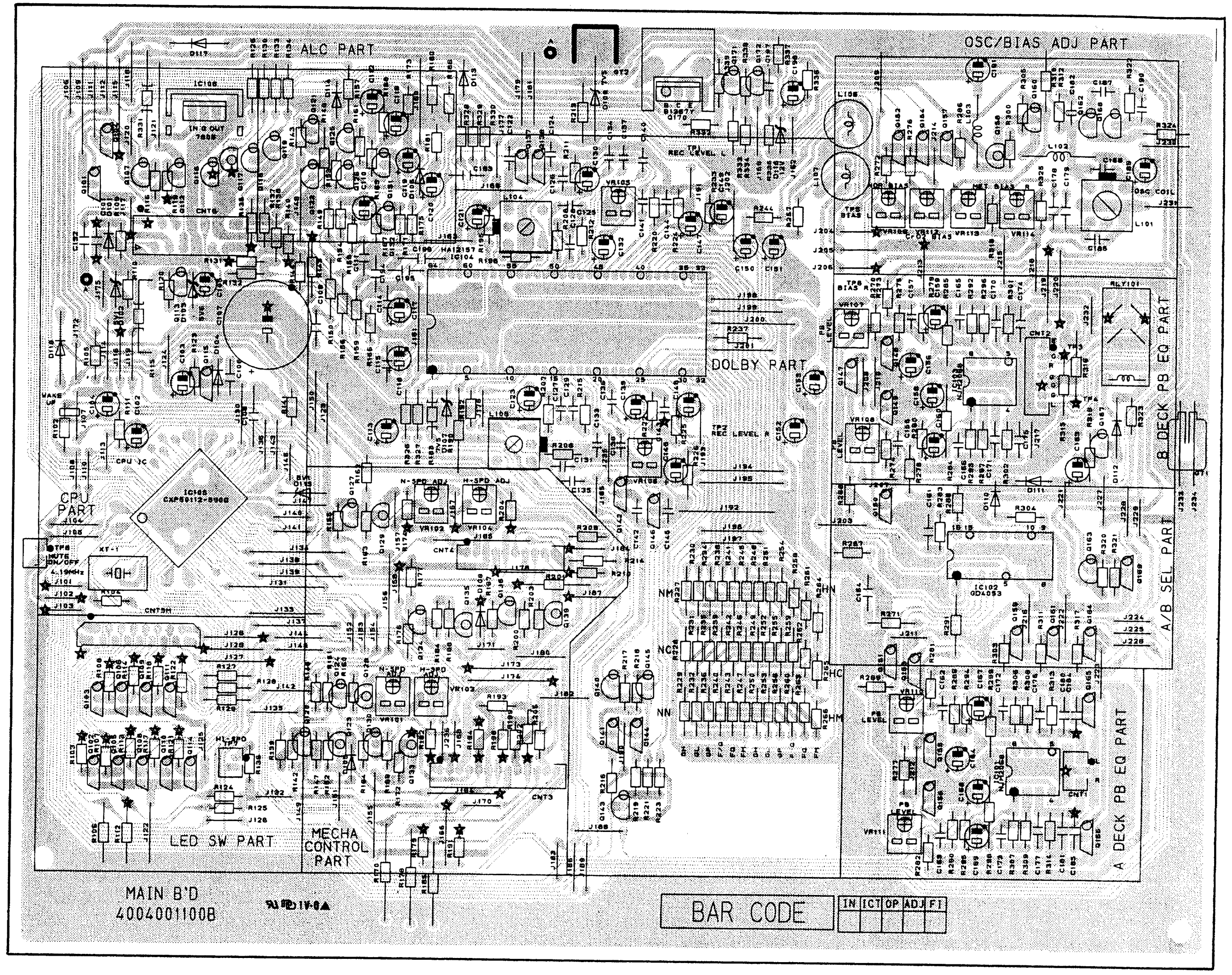


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
F S1 C6
D S1 B3
C S1 A5
B S1 A3
A S1 A4
G S3 A4
F E2
D D1
B C3
E S2 A3
G D5
C D2
F A2
A C4
a
b
c
d
e
f
AA
PCB1
PCB2
S1
S3
S4
S5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39

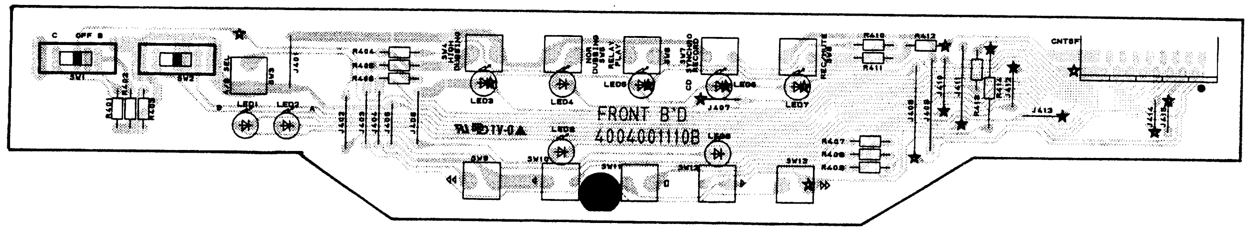
PRINTED CIRCUIT BOARDS

Model No. : DD-757

MAIN(PCB2)



FRONT(PCB1)



ELECTRICAL PARTS LIST

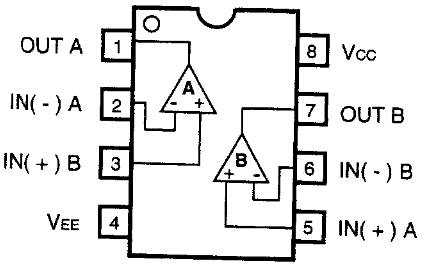
PRODUCT SAFETY NOTICE : Products marked with ⚠ have special characteristics important to safety.
If you replace any of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicing.
Resistor/Capacitor tolerance – D : (±0.5%), J : (±5%), K : (±10%), M : (±20%), Z : +80, – 20%)

Ref. No.	Description				Parts No.	Q'ty	Version
PCB1	**ASSEMBLY P.C.BOARD MAIN**						
	CAPACITORS						
C101	Ceramic Tubular	220	pF	50 V J	3519221935	1	
C102	Electrolytic SG	1	uF	50 V M	3479310971	1	
C103	Electrolytic SG	4.7	uF	50 V M	3479347971	1	
C104/C105	Electrolytic SG	10	uF	50 V M	3479310071	2	
C106	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	
C107	Electrolytic SG	2200	uF	25 V M	3409322249	1	
C108/C109	Ceramic Tubular	0.1	uF	50 V Z	3519104935	2	
C110	Electrolytic SG	1	uF	50 V M	3479310971	1	
C111	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	
C112	Electrolytic SG	220	uF	10 V M	3479322121	1	
C113	Electrolytic SG	100	uF	16 V M	3479310131	1	
C114/C115	Ceramic Tubular	270	pF	50 V J	3519271935	2	
C116-C118	Electrolytic SG	2.2	uF	50 V M	3479322971	3	
C119	Electrolytic SG	0.1	uF	50 V M	3479310871	1	
C120	Electrolytic SG	10	uF	50 V M	3479310071	1	
C121	Electrolytic SG	100	uF	16 V M	3479310131	1	
C122	Mylar	0.001	uF	100 V J	3519102120	1	
C123	Electrolytic SG	10	uF	50 V M	3479310071	1	
C124	Mylar	0.001	uF	100 V J	3519102120	1	
C125	Mylar	0.0022	uF	100 V J	3679222120	1	
C126	Mylar	0.0047	uF	100 V J	3679472120	1	
C127-C129	Mylar	0.0022	uF	100 V J	3679222120	3	
C130	Electrolytic SG	10	uF	50 V M	3479310071	1	
C131	Mylar	0.0047	uF	100 V J	3679472120	1	
C132	Electrolytic SG	10	uF	50 V M	3479310071	1	
C133/C134	Mylar	0.0022	uF	100 V J	3679222120	2	
C135-C138	Mylar	0.1	uF	63 V K	3679104297	4	
C139	Electrolytic SG	10	uF	50 V M	3479310071	1	
C140/C141	Mylar	0.1	uF	63 V K	3679104297	2	
C142	Mylar	0.001	uF	100 V J	3519102120	1	
C143/C144	Mylar	0.022	uF	100 V J	3679223120	2	
C145	Mylar	0.001	uF	100 V J	3519102120	1	
C146	Electrolytic SG	1	uF	50 V M	3479310971	1	
C147/C148	Electrolytic SG	10	uF	50 V M	3479310071	2	
C149	Electrolytic SG	1	uF	50 V M	3479310971	1	
C150/C151	Electrolytic SG	10	uF	50 V M	3479310071	2	
C152/C153	Electrolytic SG	1	uF	50 V M	3479310971	2	
C154	Ceramic Tubular	220	pF	50 V J	3519221935	1	
C155	Mylar	0.022	uF	100 V J	3679223120	1	
C156	Electrolytic SG	47	uF	16 V M	3479347031	1	
C157	Mylar	0.022	uF	100 V J	3679223120	1	
C158	Electrolytic SG	47	uF	16 V M	3479347031	1	
C159/C160	Electrolytic SG	4.7	uF	50 V M	3479347971	2	
C161	Ceramic Tubular	220	pF	50 V J	3519221935	1	
C162/C163	Mylar	0.022	uF	100 V J	3679223120	2	
C164	Electrolytic SG	47	uF	16 V M	3479347031	1	
C165/C166	Mylar	0.022	uF	100 V J	3679223120	2	
C167	Electrolytic SG	4.7	uF	50 V M	3479347971	1	
C168	Electrolytic SG	47	uF	16 V M	3479347031	1	
C169	Electrolytic SG	4.7	uF	50 V M	3479347971	1	
C170/C171	Ceramic Tubular	100	pF	50 V J	3519101935	2	
C172/C173	Mylar	0.022	uF	100 V J	3679223120	2	
C174	Ceramic Tubular	560	pF	50 V J	3519681935	1	
C175	Ceramic Tubular	680	pF	50 V J	3519681935	1	
C176/C177	Ceramic Tubular	100	pF	50 V J	3519101935	2	
C178-C181	Ceramic Tubular	560	pF	50 V J	3519561935	4	
C182	Mylar	0.0056	uF	100 V J	3679562120	1	
C183	Electrolytic SG	47	uF	16 V M	3479347031	1	
C184/C185	Ceramic Tubular	220	pF	50 V J	3519221935	2	
C186	Mylar	0.0022	uF	100 V J	3679222120	1	
C187	Mylar	0.033	uF	100 V J	3679333120	1	
C188	Mylar	0.0022	uF	100 V J	3679222120	1	
C189	Electrolytic SG	100	uF	16 V M	3479310131	1	
C190	Mylar	0.0056	uF	100 V J	3679562120	1	
C191	Electrolytic SG	100	uF	25 V M	3479310141	1	
C192	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	
C193	Ceramic Tubular	100	pF	50 V J	3519101935	1	
C194	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	
C195/C196	Ceramic Tubular	100	pF	50 V J	3519101935	2	
C197	Ceramic Tubular	470	pF	50 V J	3519471935	1	
C198	Electrolytic SG	10	uF	50 V M	3479310071	1	
	CONNECTORS						
CNT1	Wafer, 3P				4428516210	1	
CNT2	Wafer, 7P				4428516610	1	
CNT3	Wafer, 13P				4428517210	1	
CNT4	Wafer, 10P				4428516910	1	
CNT5M	Wafer, FFC, 17P				4428509015	1	
CNT6	Wafer, 13P				4428513800	1	
	DIODES						
D101	1N4148, Switching				2058322101	1	
D102	Zener, UZ 5.1 BSB				2258599103	1	
D103	Zener, UZ 5.6 BSB				2258599104	1	
D104-D106	1N4148, Switching				2058322101	3	
D107	Zener, UZ 7.5 BSC				2258599130	1	
D108	1N4148, Switching				2058322101	1	
D109	Zener, UZ 7.5 BSC				2258599130	1	
D110/D111	1N4148, Switching				2058322101	2	
D112	1N4003, Rectifier				2258128002	1	
D113/D114	1N4148, Switching				2058322101	2	
D115	Zener, UZ 5.1 BSB				2258599103	1	
D116	Zener, UZ 12.0 BSC				2258599116	1	
D117/D118	1N4003, Rectifier				2258128002	2	
	INTEGRATED CIRCUITS						
IC101	NJM2068D				2168020106	1	
IC102	GD4053				2138001117	1	
IC103	NJM2068D				2168020106	1	
IC104	HA12157				2168011135	1	
IC105	CXP50112-590Q				2139322702	1	
IC106	KIA7805P, Regulator				2168606103	1	
	COILS						
L101	OSC Bias, CQN-K5174				2638601350	1	
L102/L103	Inductor, 10 uH				2648610082	2	
L104/L105	Filter, MPX, FB-10D				2658301120	2	
L106/L107	Trap Bias, 389AC-K5049				2658501150	2	
	TRANSISTORS						
Q101	DTC114YS				2208622106	1	
Q102/Q103	DTC114TS				2208622108	2	
Q104	KRA107M/DTA114YS				2238006103	1	
Q105/Q106	DTC114TS				2208622108	2	
Q107	KTC3198Y, NPN				2208606105	1	
Q108-Q111	DTC114TS				2208622108	3	
Q112	MPSA56, PNP				2208206113	1	
Q113	MPSA06Y, NPN				2208606114	1	
Q114	DTC114TS				2208622108	1	
Q115	DTC114YS				2208622106	1	
Q116-Q119	KTD1302, NPN				2208606112	4	
Q120-Q122	KTC3198Y, NPN				2208606105	3	
Q123	MPSA56, PNP				2208206113	1	
Q124-Q127	KTC3198Y, NPN				2208606105	4	
Q128/Q129	MPSA56, PNP				2208206113	2	
Q130-Q132	KTC3198Y, NPN				2208606105	3	
Q133	MPSA56, PNP				2208206113	1	
Q134	KTC3198Y, NPN				2208606105	1	
Q135	MPSA56, PNP				2208206113	1	
Q136	KTC3198Y, NPN				2208606105	1	
Q137/Q138	DTC114TS				2208622108	2	
Q139	MPSA56, PNP				2208206113	1	
Q140	KTD1302, NPN				2208606112	1	
Q141	KRA107M/DTA114YS				2238006103	1	
Q142	DTC114TS				2208622108	1	
Q143	KTC3198Y, NPN				2208606105	1	
Q144	DTC114YS				2208622106	1	
Q145	KTD1302, NPN				2208606112	1	

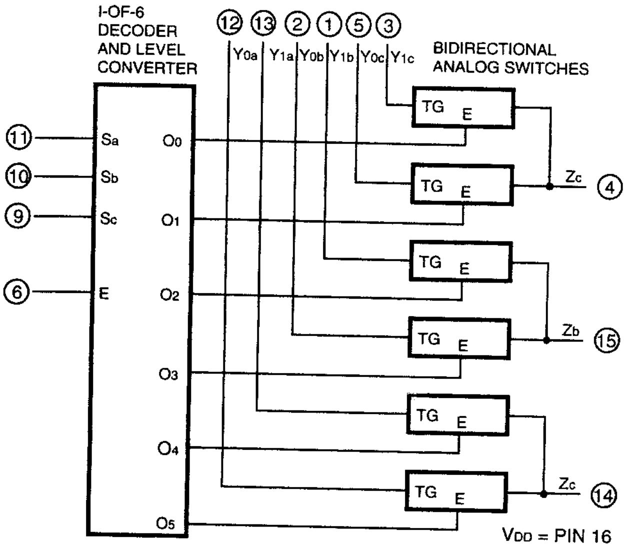
Ref. No.	Description					Parts No.	Q'ty	Version
Q146	DTC114TS					2208622108	1	
Q147-Q157	DTC114YS					2208622106	11	
Q158	MPSA56, PNP					2208206113	1	
Q159	DTC114YS					2208622106	1	
Q160	KTC2236A/KTC3205, NPN					2228407117	1	
Q161	DTC114YS					2208622106	1	
Q162	KTC2236A/KTC3205, NPN					2228407117	1	
Q163	KTA1015Y/BKTA1266, PNP					2208206105	1	
Q164-Q166	DTC114YS					2208622106	3	
Q167	KTC3198Y, NPN					2208606105	1	
Q168	KTC2236A/KTC3205, NPN					2228407117	1	
Q169	DTC114YS					2208622106	1	
Q170	2SB1367Y/KTB1367, PNP					2028106109	1	
Q171/Q172	KTC3198Y, NPN					2208606105	2	
	RESISTORS							
R102	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R103	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R104	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R105	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R106	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R107/R108	Metal Film	220	ohm	1/5 W	J	3029221970	2	
R109	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R110	Carbon Film	220	kohm	1/5 W	J	3069224970	1	
R111	Metal Film	4.7	ohm	1/5 W	J	3029479970	1	
R112	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R113/R114	Metal Film	220	ohm	1/5 W	J	3029221970	2	
R115	Metal Film	47	ohm	1W	J	3029470470	1	
R116	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R117/R118	Metal Film	220	ohm	1/5 W	J	3029221970	2	
R119	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R120	Metal Film	150	ohm	1/5 W	J	3029151970	1	
R121/R122	Metal Film	220	ohm	1/5 W	J	3029221970	2	
R123	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R124/R125	Metal Film	4.7	kohm	1/5 W	J	3029472970	2	
R126	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R127-R129	Metal Film	4.7	kohm	1/5 W	J	3029472970	3	
R130	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R131	Carbon Film	56	kohm	1/5 W	J	3069563970	1	D
(R131)	Carbon Film	51	kohm	1/5 W	J	3069513970	1	A,KS,PT INDO
R132	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	D
(R132)	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	A,KS,PT INDO
R133/R134	Metal Film	1	kohm	1/5 W	J	3029102970	2	
R135	Carbon Film	56	kohm	1/5 W	J	3069563970	1	D
(R135)	Carbon Film	51	kohm	1/5 W	J	3069513970	1	A,KS,PT INDO
R136	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R137	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	D
(R137)	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	A,KS,PT INDO
R138	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R139	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R140	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R141	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R142/R143	Metal Film	1.5	kohm	1/5 W	J	3029152970	2	
R144	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R145	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R146	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R147	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R148	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R149	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R150	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R151	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R152	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R153	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R154	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R155	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R156	Metal Film	1.2	kohm	1/5 W	J	3029122970	1	
R157	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R158	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R159	Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R160	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R161	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R162	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R163	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R164	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R165	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R166/R167	Metal Film	1.2	kohm	1/5 W	J	3029122970	2	
R168	Carbon Film	3.3	Mohm	1/5 W	J	3069335970	1	
R169	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R170	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R171	Carbon Film	470	kohm	1/5 W	J	3069474970	1	
R172	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R173	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R174	Metal Film	560	ohm	1/5 W	J	3029561970	1	
R175	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R176	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R177	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R178	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R179	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R180	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R181	Carbon Film	56	kohm	1/5 W	J	3069563970	1	
R182	Metal Film	560	ohm	1/5 W	J	3029561970	1	
R183	Carbon Film	120	ohm	1/4 W	J	3069121270	1	
R184	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R185	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R186	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R188	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R190	Metal Film	3.9	kohm	1/5 W	J	3029392970	1	
R191	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R192	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
R193	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R194	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R195	Carbon Film	18	kohm	1/5 W	J	3069183970	1	
R196	Metal Film	2.7	kohm	1/5 W	J	3029272970	1	
R197	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R198	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R199	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R200	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R201	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R202	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R203	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R204	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R205	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R206	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R207/R208	Carbon Film	22	kohm	1/5 W	J	3069223970	2	
R209/R210	Carbon Film	47	kohm	1/5 W	J	3069473970	2	
R211	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R212	Metal Film	560	ohm	1/5 W	J	3029561970	1	
R213	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R214	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R215	Metal Film	560	ohm	1/5 W	J	3029561970	1	
R216	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R217/R218	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R219-R223	Carbon Film	100	kohm	1/5 W	J	3069104970	5	
R224/R225	Carbon Film	51	kohm	1/5 W	J	3069513970	2	
R226	Metal Film	2.2	kohm	1/5 W	J	3029222970	1	
R227	Carbon Film	39	kohm	1/5 W	J	3069393970	1	
R228	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R229	Carbon Film	12	kohm	1/5 W	J	3069123970	1	
R230	Carbon Film	43	kohm	1/5 W	J	3069433970	1	
R231	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R232	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R233	Metal Film	2.2	kohm	1/5 W	J	3029222970	1	
R234	Carbon Film	43	kohm	1/5 W	J	3069433970	1	
R235	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R236	Carbon Film	43	kohm	1/5 W	J	3069433970	1	
R237	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R238	Carbon Film	27	kohm	1/5 W	J	3069273970	1	
R239	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R240	Carbon Film	68	kohm	1/5 W	J	3069683970	1	
R241	Carbon Film	120	kohm	1/5 W	J	3069124970	1	
R242	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R243	Carbon Film	91	kohm	1/5 W	J	3069913970	1	
R244	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R245	Carbon Film	120	kohm	1/5 W	J	3069124970	1	
R246	Carbon Film	150	kohm	1/5 W	J	3069154970	1	
R247	Carbon Film	100	kohm	1/5 W	J	3069104970	1	
R248	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R249	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R250	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R251	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R252	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R253	Carbon Film	39	kohm	1/5 W	J	3069393970	1	
R254	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R255	Carbon Film	27	kohm	1/5 W	J	3069273970	1	
R256	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R257	Carbon Film	5.6	kohm	1/5 W	J	3069562970	1	
R258	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R259/R260	Carbon Film	22	kohm	1/5 W	J	3069223970	2	
R261/R262	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R263/R264	Carbon Film	120	kohm	1/5 W	J	3069124970	2	
R265	Carbon Film	150	kohm	1/5 W	J	3069154970	1	
R266	Carbon Film	120	kohm	1/5 W	J	3069124970	1	
R267-R269	Carbon Film	33	kohm	1/5 W	J	3069333970	3	
R270	Metal Film	3.9	kohm	1/5 W	J	3029392970	1	
R271	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R272	Metal Film	820	ohm	1/5 W	J	3029821970	1	
R273	Metal Film	47	ohm	1/5 W	J	3029470970	1	
R274/R275	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R276	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R277	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R278	Metal Film	47	ohm	1/5 W	J	3029470970	1	
R279/R280	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R281/R282	Metal Film	47	ohm	1/5 W	J	3029470970	2	
R283	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R284/R285	Metal Film	33	ohm	1/5 W	J	3029330970	2	
R286	Metal Film	1	kohm	1/5 W	J	3029102970	1	
R288	Metal Film	100	ohm	1/5 W	J	3029101970	1	
R289/R290	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R291	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R292/R293	Carbon Film	6.8	kohm	1/5 W	J	3069682970	2	
R294/R295	Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R296/R297	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R298/R299	Metal Film	33	ohm	1/5 W	J	3029330970	2	
R300-R302	Carbon Film	100	kohm	1/5 W	J	3069104970	3	
R303	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R304	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R305	Metal Film	1.5	kohm	1/5 W	J	3029152970	1	
R306/R307	Carbon Film	6.8	kohm	1/5 W	J	3069682970	2	
R308-R310	Carbon Film	100	kohm	1/5 W	J	3069104970	3	
R311/R312	Carbon Film	33	kohm	1/5 W	J	3069333970	2	
R313/R314	Carbon Film	100	kohm	1/5 W	J	3069104970	2	
R315/R316	Metal Film	10	ohm	1/5 W	J	3029100970	2	
R317	Carbon Film	10	kohm	1/5 W	J	3069103970	1	
R318	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R319	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R320	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R321	Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R322	Carbon Film	33	kohm	1/5 W	J	3069333970	1	
R323	Metal Film	10	ohm	1/5 W	J	3029100970	1	
R324	Metal Film	4.7	ohm	1/5 W	J	3029479970	1	
R325	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R326/R327	Carbon Film	10	kohm	1/5 W	J	3069103970	2	
R328-R330	Metal Film	1	kohm	1/5 W	J	3029102970	3	
R331	Metal Film	68	ohm	2W	J	3029680570	1	
R332	Carbon Film	47	kohm	1/5 W	J	3069473970	1	
R333	Metal Film	470	ohm	1/5 W	J	3029471970	1	
R334	Carbon Film	22	kohm	1/5 W	J	3069223970	1	
R335	Metal Film	680	ohm	1/5 W	J	3029681970	1	
R336	Metal Film	4.7	kohm	1/5 W	J	3029472970	1	
R337	Metal Film	220	ohm	1/5 W	J	3029221970	1	
R338	Metal Film	470	ohm	1/5 W	J	3029471970	1	
R339	Metal Film	47	ohm	1/5 W	J	3029470970	1	
	SEMI FIXED RESISTORS							
VR101/102	220 (B)					3248022143	2	
VR103/104	500 (B)					3248050143	2	
VR105-108	10 k(B)					3248010343	4	
VR109	2 k(B)					3248020243	1	
VR110/111	10 k(B)					3248010343	2	
VR112	2 k(B)					3248020243	1	
VR113/114	50 k(B)					3248050343	2	
	MISCELLANEOUS							
XT-1	CST4.19MHz					3938124006	1	
RLY101	Relay, G5V-2-H1					5528040001	1	
	Plate, Ground					6165143510	1	
	Wire, HI-WP #24, Black, 140mm					152624101444	1	
33	Heatsink					7505202410	1	
34	Heatsink					7505202410	1	
36	Plate Ground					6165143510	1	
PCB2	**ASSEMBLY P.C.BOARD FRONT**							
R401	RES, Carbon Film	15	kohm	1/5 W	J	3069153970	1	
R402	RES, Metal Film	1.2	kohm	1/5 W	J	3029122970	1	
R403	RES, Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R404	RES, Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R405	RES, Metal Film	3.3	kohm	1/5 W	J	3029332970	1	
R406	RES, Metal Film	1.8	kohm	1/5 W	J	3029182970	1	
R407	RES, Carbon Film	8.2	kohm	1/5 W	J	3069822970	1	
R408	RES, Metal Film	1.8	kohm	1/5 W	J	3029182970	1	
R409/R410	RES, Metal Film	3.3	kohm	1/5 W	J	3029332970	2	
R411	RES, Metal Film	1.8	kohm	1/5 W	J	3029182970	1	
R412-R414	RES, Metal Film	1.2	kohm	1/5 W	J	3029122970	3	
LED1-LED5	LED, SLR-34GC N49, Green					2381040301	5	
LED6/LED7	LED, SLR-34URC N49, Red					2381215704	2	
LED8/LED9	LED, SLR-34GC N49, Green					2381040301	2	
CNT5F	Connector, Wafer, FFC, 17P					4428517826	1	
18(SW3-13)	Switch Tact					4658004410	11	

IC FUNCTIONAL BLOCK DIAGRAM

IC101, IC103 : NJM2068D

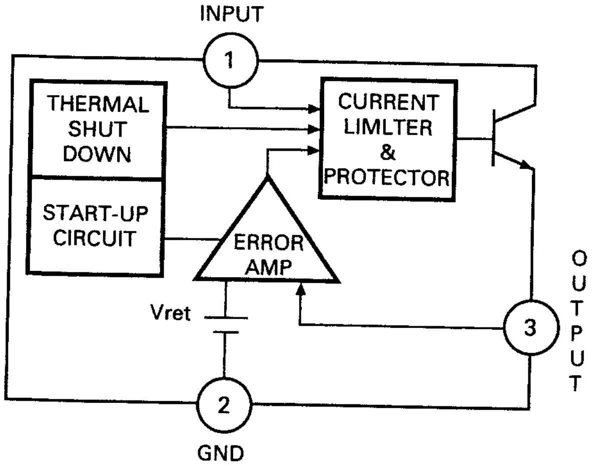

OUT A
1
IN(-) A
2
IN(+) B
3
VEE
4
8
Vcc
7
OUT B
6
IN(-) B
5
IN(+) A
A
B

IC102 : GD4053B

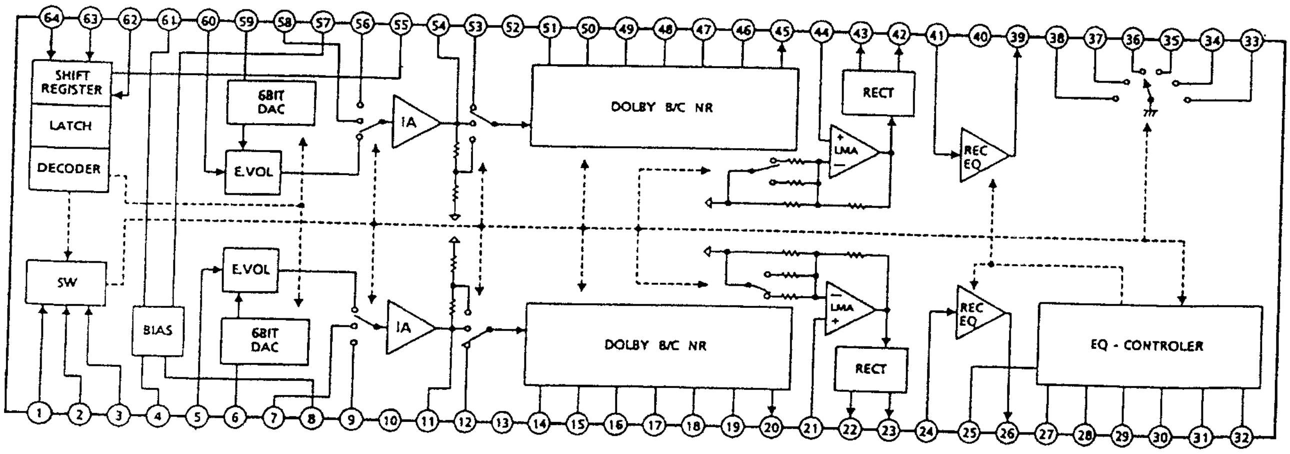

I-OF-6
DECODER
AND LEVEL
CONVERTER
⑫ ⑬ ② ① ⑤ ③
Y0a
Y1a
Y0b
Y1b
Y0c
Y1c
BIDIRECTIONAL
ANALOG SWITCHES
⑪
Sa
⑩
Sb
⑨
Sc
⑥
E
O0
O1
O2
O3
O4
O5
TG
E
Zc
④
Zb
⑮
Zc
⑭

VDD = PIN 16
VSS = PIN 8
VEE = PIN 7
O = PIN NUMBER

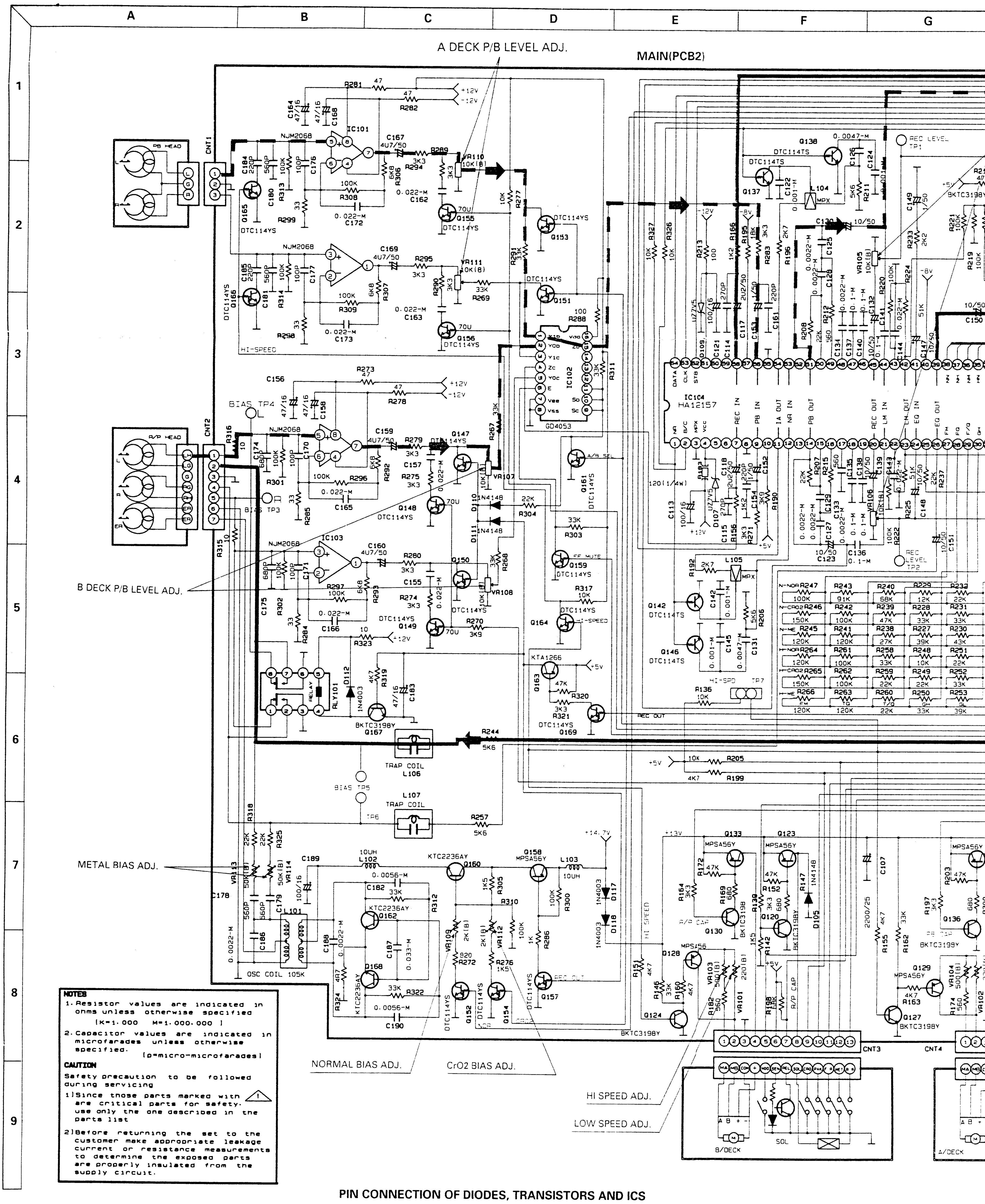
IC106 : KIA7806P


INPUT
1
THERMAL
SHUT
DOWN
CURRENT
LIMLTER
&
PROTECTOR
START-UP
CIRCUIT
ERROR
AMP
Vret
3
OUTPUT
2
GND

IC104 : HA12157NT


SHIFT
REGISTER
LATCH
DECODER
6BIT
DAC
E.VOL
IA
DOLBY B/C NR
RECT
LMA
REC
EQ
SW
BIAS
E.VOL
6BIT
DAC
IA
DOLBY B/C NR
LMA
RECT
REC
EQ
EQ - CONTROLER
64
63
62
61
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
39
38
37
36
35
34
33
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

SCHEMATIC DIAGRAM


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
A DECK P/B LEVEL ADJ.
MAIN(PCB2)
PB HEAD
CNT1
NJM2068
IC101
VR110
VR111
Q165
Q166
Q155
Q156
Q153
Q151
IC102
GD4053
Q137
Q138
L104
MPX
REC LEVEL TP1
IC104
HA12157
VR105
VR106
R/P HEAD
CNT2
BIAS TP4
BIAS TP3
IC103
Q147
Q148
Q150
Q149
VR107
VR108
Q161
Q159
FF MUTE
Q164
HI-SPEED
Q163
KTA1266
Q169
REC OUT
L105
Q142
Q146
DTC114TS
HI-SPD TP7
REC LEVEL TP2
B DECK P/B LEVEL ADJ.
RLY101
RELAY
Q167
BKTC3198Y
TRAP COIL L106
BIAS TP5
L107 TRAP COIL
TP6
METAL BIAS ADJ.
VR113
VR114
L101
OSC COIL 105K
L102
Q160
KTC2236AY
Q162
Q168
Q158
MPSA56Y
L103
Q152
Q154
Q157
VR109
VR112
NORMAL BIAS ADJ.
CrO2 BIAS ADJ.
Q133
Q123
Q130
Q120
Q128
Q124
VR103
VR101
R/P CAP
Q136
Q129
Q127
VR104
VR102
CNT3
CNT4
HI SPEED ADJ.
LOW SPEED ADJ.
B/DECK
SOL
A/DECK

NOTES

1. Resistor values are indicated in ohms unless otherwise specified
   (K=1.000 M=1.000.000)
2. Capacitor values are indicated in microfarades unless otherwise specified.
   (p=micro-microfarades)

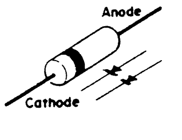
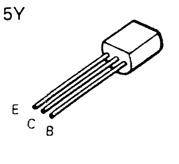
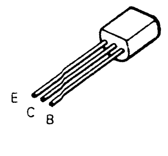
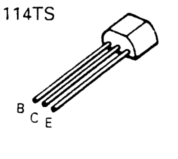
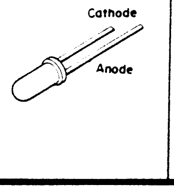
CAUTION

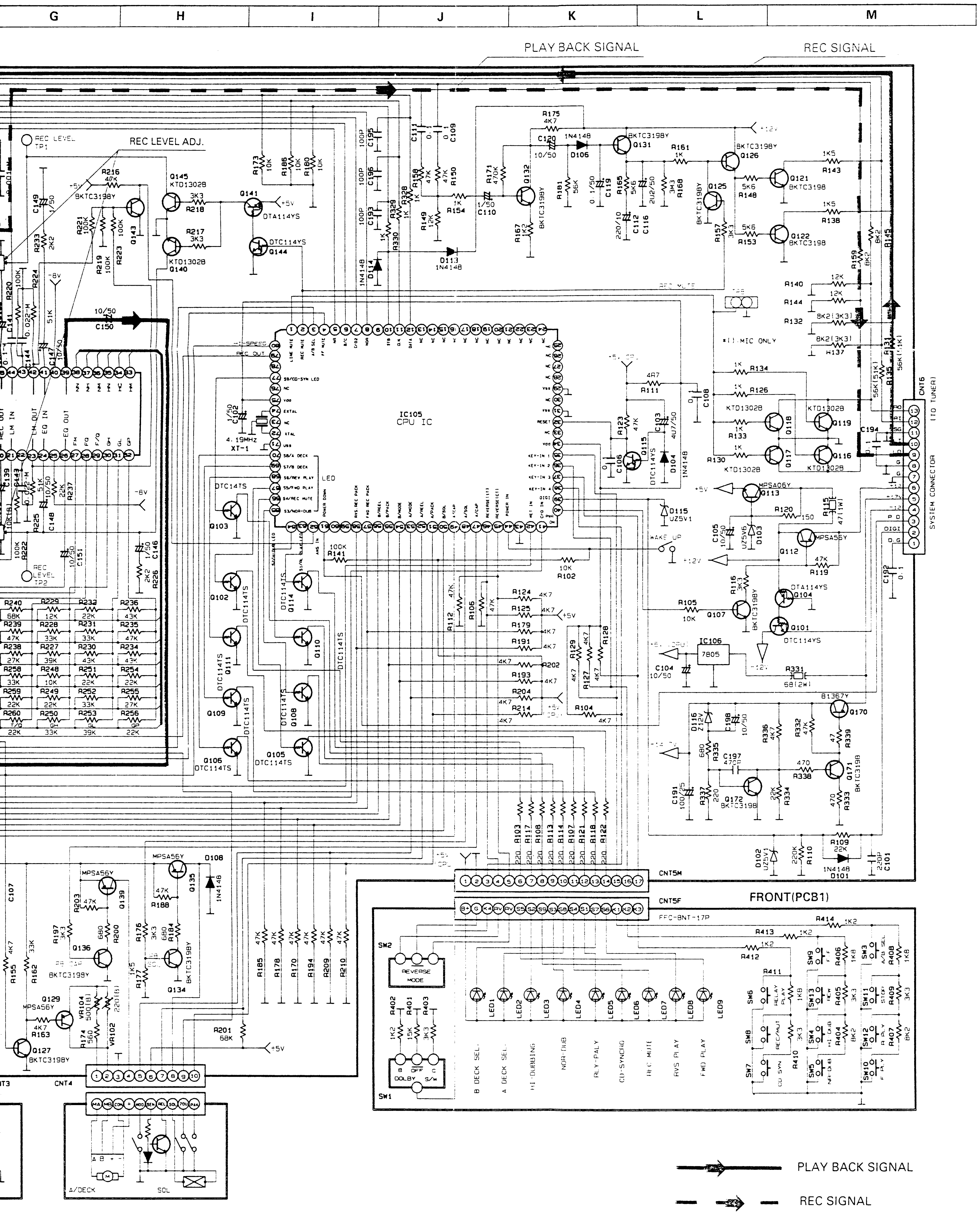
Safety precaution to be followed during servicing

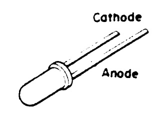
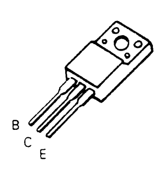
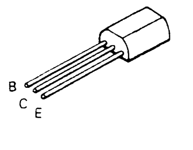
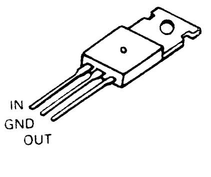
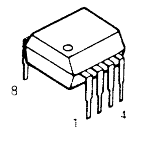
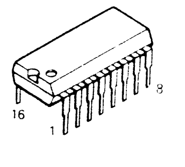
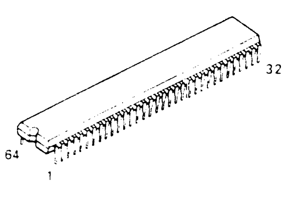
1) Since those parts marked with ⚠ are critical parts for safety. use only the one described in the parts list

2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

PIN CONNECTION OF DIODES, TRANSISTORS AND ICS

ZENER IN4003 IN4148	KTD1302 KTC3198/KTC1815 KTA1266/KTA1015Y	MPSA56Y MPSA06Y	DTA114YS DTC114YS DTC114TS	SLR-34URC N49 SLR-34GC N49
 Anode Cathode				 Cathode Anode


G
H
I
J
K
L
M
PLAY BACK SIGNAL
REC SIGNAL
REC LEVEL ADJ.
REC LEVEL TP1
REC LEVEL TP2
IC105
CPU IC
4.19MHz
XT-1
IC106
7805
CNT6
(TO TUNER)
SYSTEM CONNECTOR
CNT5M
CNT5F
FRONT(PCB1)
FFC-BNT-17P
SW1
SW2
REVERSE MODE
DOLBY
B
OFF
C
S/W
LED1
LED2
LED3
LED4
LED5
LED6
LED7
LED8
LED9
B DECK SEL.
A DECK SEL.
HI-DUBBING
NOR-DUB
RLY-PLAY
CD-SYNCHG
REC MUTE
RVS PLAY
FWD PLAY
CNT4
A/DECK
SOL
Q101
Q102
Q103
Q104
Q105
Q106
Q107
Q108
Q109
Q110
Q111
Q112
Q113
Q114
Q115
Q116
Q117
Q118
Q119
Q121
Q122
Q125
Q126
Q127
Q129
Q131
Q132
Q134
Q135
Q136
Q140
Q141
Q143
Q144
Q145
Q170
Q171
Q172
KTD1302B
KTC3198Y
DTA114YS
DTC114YS
DTC114TS
MPSA56Y
MPSA06Y
B1367Y
1N4148
*11 MIC ONLY
+5V
+12V
-8V
PLAY BACK SIGNAL
REC SIGNAL

SLR-34URC N49 SLR-34GC N49	2SBB67Y/KTB1367	KTC2236A/KTC3205	KIA7805P	NJM2068D	GD4053B	HA12157NT
						

Cathode
Anode
B
C
E
B
C
E
IN
GND
OUT
8
1
4
16
1
8
32
64
1